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Designing Hybrid Teaching Spaces in a post-pandemic South African University

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Framework

- Take away messages
- Rationale
- Study design
- Results
- Way forward

Take away messages

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Take away messages

1. **Hybrid** teaching in post-pandemic SA is **complicated**
   a) Pre- and post-pandemic realities differed substantially
   b) Institutional systems did not change (emergency response only)

2. High-Tech Hybrid System created **dependencies**
   a) Standardised teaching spaces (HSTS) ~~silver bullet~~
   b) Excellent proactive, responsive technical **support** is critical

3. "**Design-time**" of HSTS must be close to "Teach-time"
   a) Guard against idealistic classroom design
   b) Design process must be more iterative (include user experiences)
   c) Differentiated (not standardised) design wins the prize

4. Activity Centred Analysis and Design (ACAD) **framework**
   a) Useful for analysis of HSTS from a teaching perspective
   b) It should be used for design as well

Rationale for the study

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Rationale for the study

- Institutional vision for learning spaces (SU 2019):
  - **Flexibility** that allows for different pedagogical approaches.

  - **Sustainability** through the standardisation of design and technology across the institution.

  - The basics of **comfort** and **functionality** also inspire students and university teachers.

  - **Multimedia technology-rich** spaces that allow for the digitisation of the learning experience.

- Mid- to end pandemic Extended Learning Spaces (ELS) project
- Need for an evaluation of the system: Phase 1 – Teachers' perspectives
- A need for more empirical studies on synchronous-hybrid learning (Raes et al 2020)
- The use of the ACAD framework for student classroom engagement (Raes 2022)

The ELS System (Extended Learning Space)
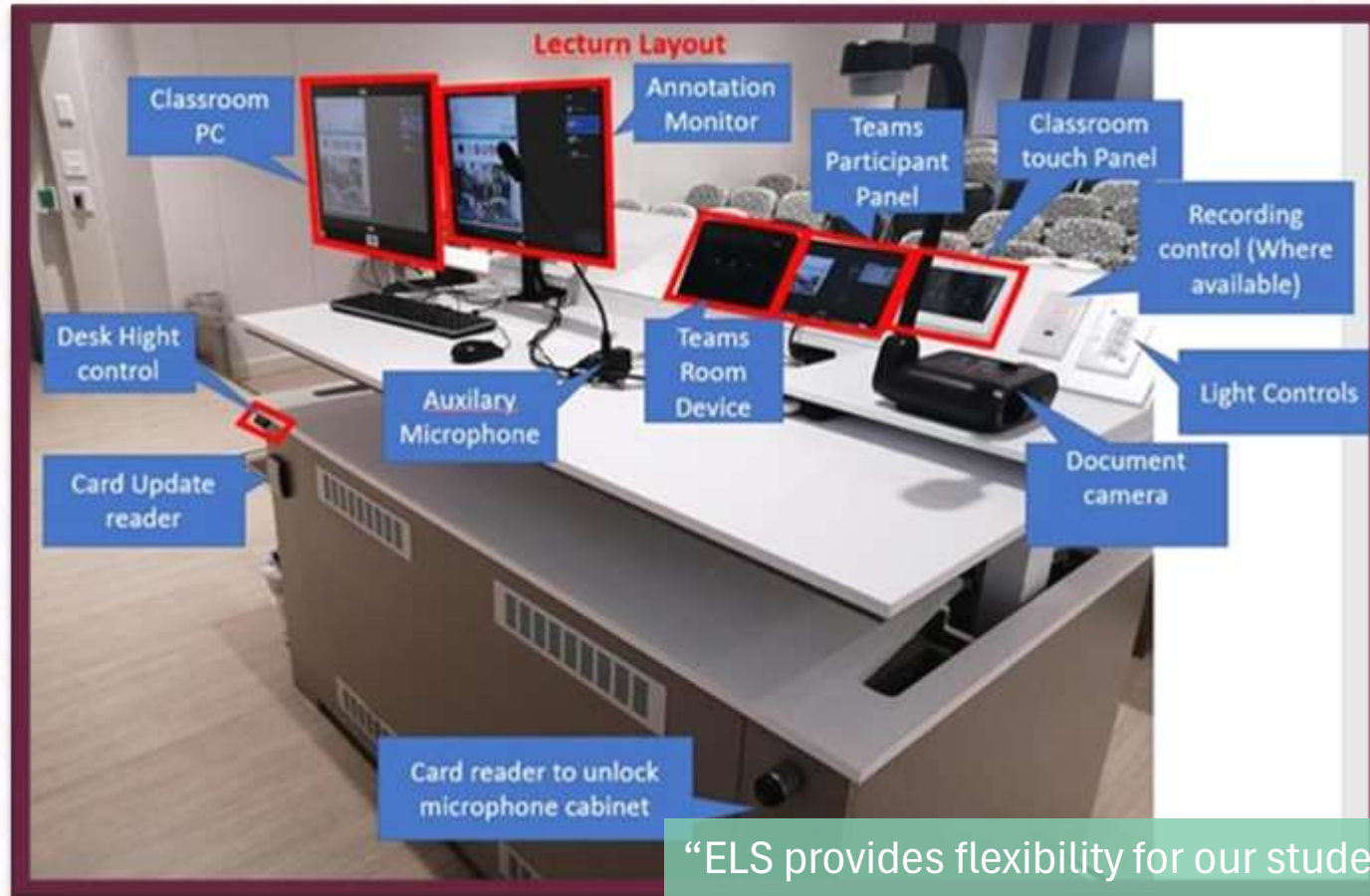
"ELS provides flexibility for our students to access learning materials, lectures, and resources regardless of their location or schedule. It allows for asynchronous learning, catering to diverse student needs and preferences"

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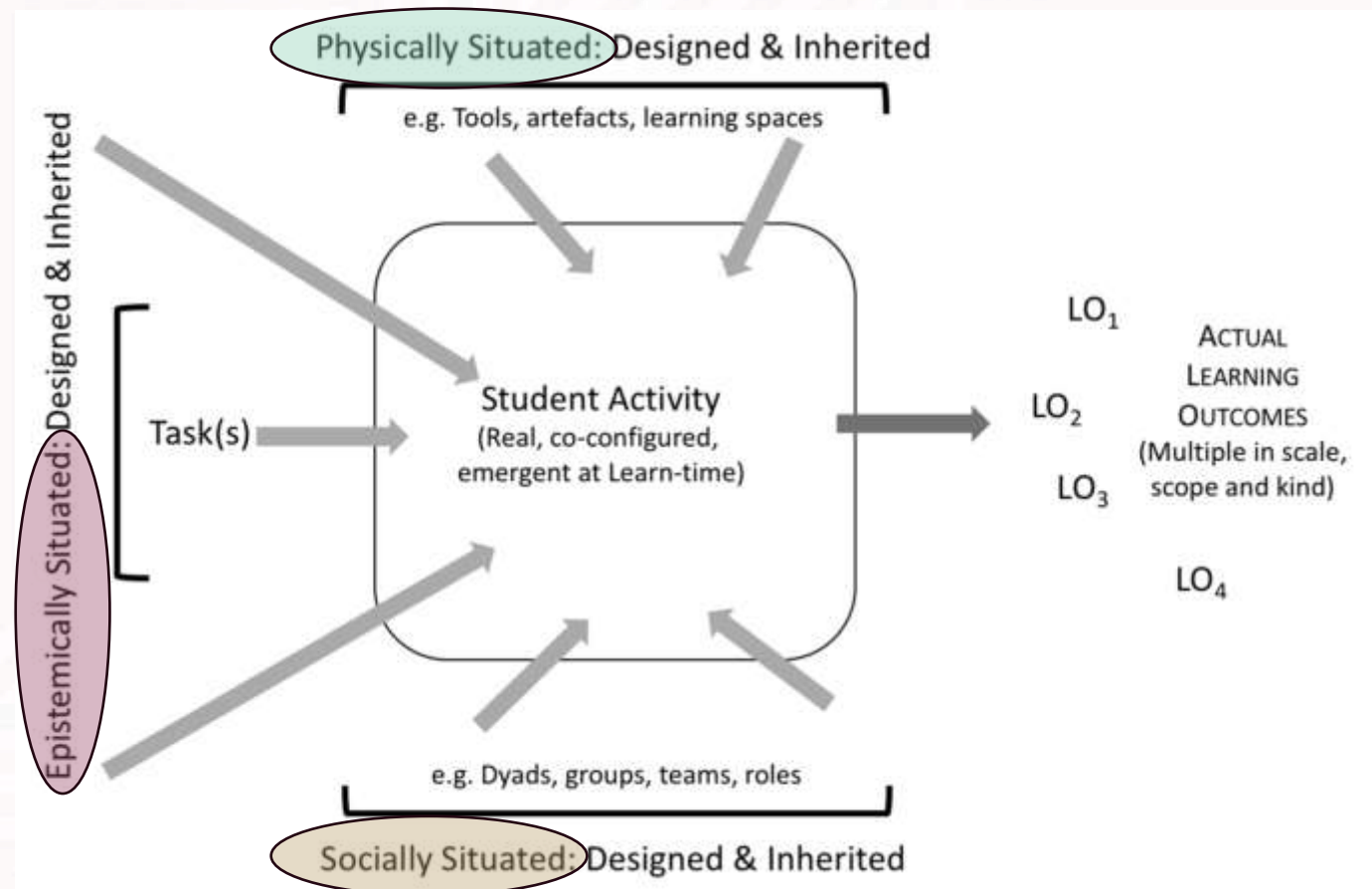UNIVERSITEIT

Study Design and Results

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Study Design

- Proposal and ethical clearance

- Sociomaterial* approach

- Adapted ACAD framework to teaching focused

- Questionnaire (open and closed - built on ACAD framework)

- Thematical analysis using ACAD

"sociomateriality urges greater recognition of the role of the material context in shaping learning. It takes issue with the common predilection to view material things as static and inconsequential and instead advocates for seeing them as carrying relational impacts that shape perceptions and actions" (Tietjen et al 2023)

ACAD: Activity-Centred Analysis and Design

• "Activity-Centred Analysis and Design (ACAD) is a meta-theoretical framework for understanding and improving **local, complex, learning situations**"

• ACAD requires a switch of view: from the science of learning to the **pragmatics of educational design**. 'Pragmatics' is concerned with action – with how people make sense of things and get things done in real-world contexts. ACAD aligns with the need for **actionable knowledge**" (Quotes and Figure from: Goodyear, Carvalho & Yeoman 2021)

Physically Situated: Designed & Inherited
e.g. Tools, artefacts, learning spaces

Designed & Inherited

Epistemically Situated: Designed & Inherited

Task(s)

Student Activity
(Real, co-configured, emergent at Learn-time)

LO_1
LO_2
LO_3
LO_4

ACTUAL LEARNING OUTCOMES
(Multiple in scale, scope and kind)

e.g. Dyads, groups, teams, roles
Socially Situated: Designed & Inherited

NB: Design-Time vs Learn/ Teach-Time

ACAD Research Questions

- The study has the following **main research question**:

  What are the situated teaching experiences of university teachers in using an innovative technology-infused hybrid learning space?

- Three **sub-questions** apply:

  - *What are the enablers/constraints regarding the technical use of the ELS system for teaching?* (**Physical situatedness**)

  - *What is the emotional engagement/detachment level of lecturers with their students and other role players in these technology-infused classrooms?* (**Social situatedness**)

  - *How is the ELS system pedagogically used?* (**Epistemic situatedness**)

Results

Physical situatedness
a) One-click integration = streamlined hybrid participation
b) Continuous technical troubleshooting & lack of consistent support

Social situatedness
a) Hybrid: equal engagement with online and in-class students
b) In-person: emotional & physical barrier

Epistemic situatedness
a) Minor pedagogic adaptation
b) Dissonance between institutional *design-time* and practitioner *teach-time*

Take-home II

Take-home messages II

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References

Goodyear, Peter, Lucila Carvalho, and Pippa Yeoman. 2021. "Activity-Centred Analysis and Design (ACAD): Core Purposes, Distinctive Qualities and Current Developments." *Educational Technology Research and Development* 69 (2): 445–64. https://doi.org/10.1007/S11423-020-09926-7.

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Thank you
Dankie
Bedankt

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