



# REFLECTING ON NEXT GENERATION LEARNING AND TEACHING SPACES THE VOICE OF THE ACADEMIC COMMUNITY

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# REFLECTING ON NEXT GENERATION LEARNING AND TEACHING SPACES: THE VOICE OF THE ACADEMIC COMMUNITY

## INTRODUCTION

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- The **role of L&T spaces**, both flexible and rich in technology, in supporting real-world and cross-disciplinary problem solving L&T methodologies is crucial
- Three major trends inform current **L&T space design**:
  - learning principles supporting social and active learning strategies
  - human-centred design
  - digital devices that enrich learning
- **Students' voice and collaboration with staff** during the design process of L&T spaces is key and so is research on pedagogical principles and evidence-based evaluations



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- LTSHE - Learning and Teaching Space in Higher Education



**Aim:** to develop a **set of comprehensive design principles** that HEIs can draw on to inform the development of new learning spaces (NLS)

Spaces should be put in perspective, highlighting their **role in assuring and improving the quality of L&T**



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## INTRODUCTION

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### THE UNIVERSITY OF AVEIRO

- Created in **1973** it is now a public foundation under private law
- Its **mission** is the provision of undergraduate and postgraduate education, the generation of research and the promotion of cooperation with society
- Attended by about **16,000 students** in undergraduate and postgraduate programmes
- It is an institution of research-led education, constituted by **16 departments, 19 research units, 4 polytechnic schools, interface units, and a vocational education network**
- Its integrated structure permits the **articulation and harmonisation of the teaching and research environments**



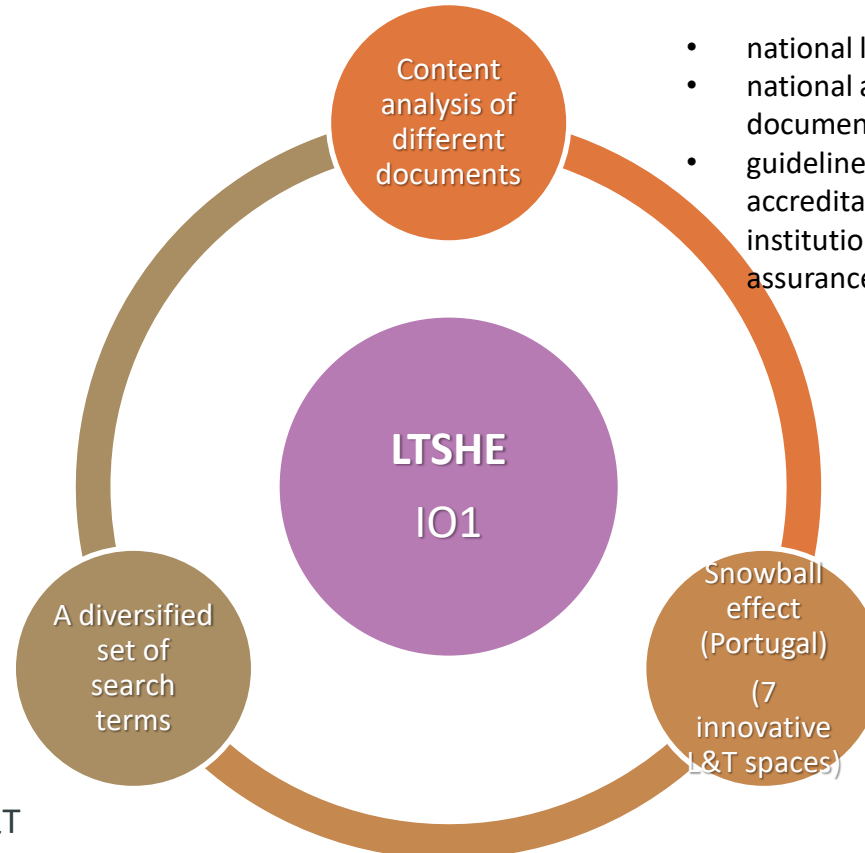
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- Output 1 - Exploration of policy and practice: learning and teaching space in Portuguese higher education

Digitalisation in HE  
HE funding programmes  
HE law  
University didactics  
University organisation  
University strategy  
Structure  
Infrastructure  
Room  
Teaching  
Innovative  
Space  
Area  
L&T in HE  
L&T spaces  
Quality assurance of L&T spaces  
Quality assurance of digital(ised) L&T  
Pedagogic innovation



- national legislation
- national and institutional policy documents
- guidelines for the assessment and accreditation of degree programs, institutions and internal quality assurance systems

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- Output 2 - Case Study of Experience: designing, developing and using learning and teaching spaces in Portuguese higher education – The Case of the University of Aveiro

- **Main Goal**

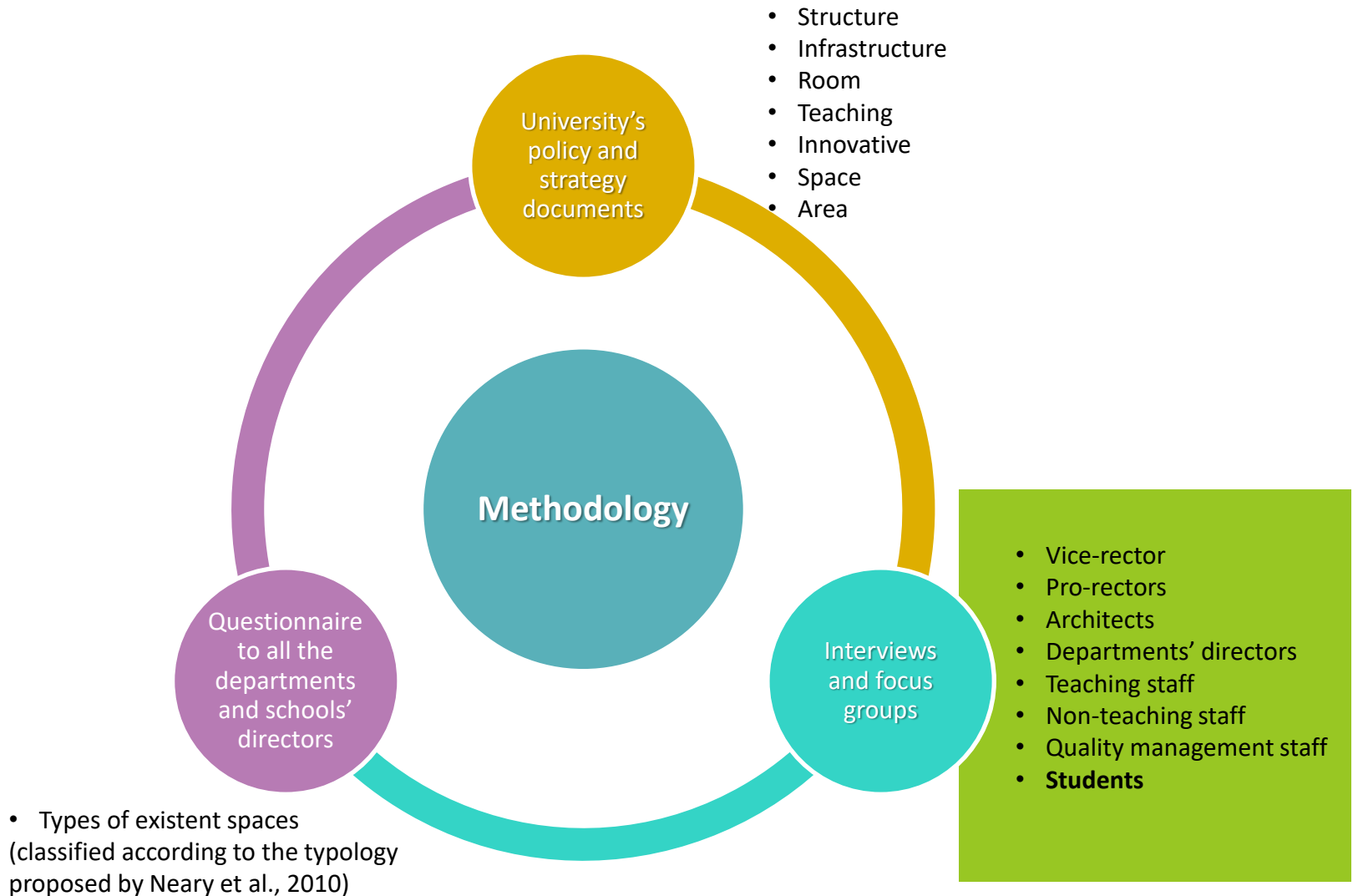
- To explore, through a set of case studies, the **experience of designing and developing learning and teaching spaces** within individual universities, determining what works and what does not work and **highlighting examples of practice** that indicate attitudes and approaches to learning and teaching space.
- A set of **key-learning points from the partnership** will then be drawn as a result of this IO.



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## METHODS

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## METHODS

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### Stakeholders' perceptions on the design, implementation and use of L&T spaces in the University of Aveiro – Focus Groups and Interviews

- Content analysis, using a grid composed of 4 broad categories:
  - **The role of L&T physical spaces in supporting and/or promoting new approaches to L&T;**
  - The **existent L&T physical spaces** and their **relevance** and **usefulness** for the development of an **adequate and quality L&T process;**
  - The **new (innovative) L&T spaces the institution has** and the **new (innovative) L&T spaces the institution needs**, including for/by whom are they needed/required;
  - The **digital structures needed** for blended and hybrid learning and teaching.
- The content analysis undertaken used also as **descriptors the type of stakeholders** involved in each interview and focus group.





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## RESULTS

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<i>Category</i>	<i>Indicator</i>	<i>Frequency</i>
1. Role of L&T physical spaces	1.1 Characteristics/Critical aspects	48
	1.2 Intentions/Suggestions for the university	13
2. Existent L&T physical spaces	2.1 Characteristics/Critical aspects	<b>100</b>
	2.2 Intentions/Suggestions for the university	11
3. New L&T spaces	3.1 Characteristics/Critical aspects	<b>107</b>
	3.2 Intentions/Suggestions for the university	<b>110</b>
4. Digital structures needed	4.1 Characteristics/Critical aspects	29
	4.2 Intentions/Suggestions for the university	14

- Most mentioned aspects were related to **characteristics and intentions of new L&T spaces**, and also **characteristics of existent L&T spaces**
- Less mentioned aspects were related to **intentions concerning the role of L&T spaces** and the **intentions related to digital structures needed**



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## RESULTS AND DISCUSSION

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- When considering the **existing L&T spaces**, stakeholders emphasize:
  - a lack of comfort in terms of furniture, heating, acoustics, air quality, etc., sometimes even in more recent buildings
  - that most L&T spaces are not suitable for the implementation of active learning methodologies, but can be adapted
  - due to lack of resources, there has been small investment to adapt L&T spaces
  - digital transition is being implemented in L&T spaces, with investment in hybrid learning conditions in key identified rooms over the campus
  - a lack of space and very large classes, given the challenge of the university's growth of attending students



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## RESULTS AND DISCUSSION

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- In what concerns **future or intended next-generation L&T spaces**, the stakeholders reveal the need for:
  - flexible furniture, allowing different layouts to accommodate a diversity of pedagogical strategies
  - better acoustics, connectivity, and management (security, distribution of teaching service, etc.)
  - investment in L&T spaces both indoor and outdoor
  - good ventilation conditions, natural light, thermal comfort
  - quality Wi-Fi network assurance across campus, indoor and outdoor
  - modernization of laboratories
  - students to be included on the design of new solutions for L&T spaces



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## CONCLUSIONS AND RECOMMENDATIONS

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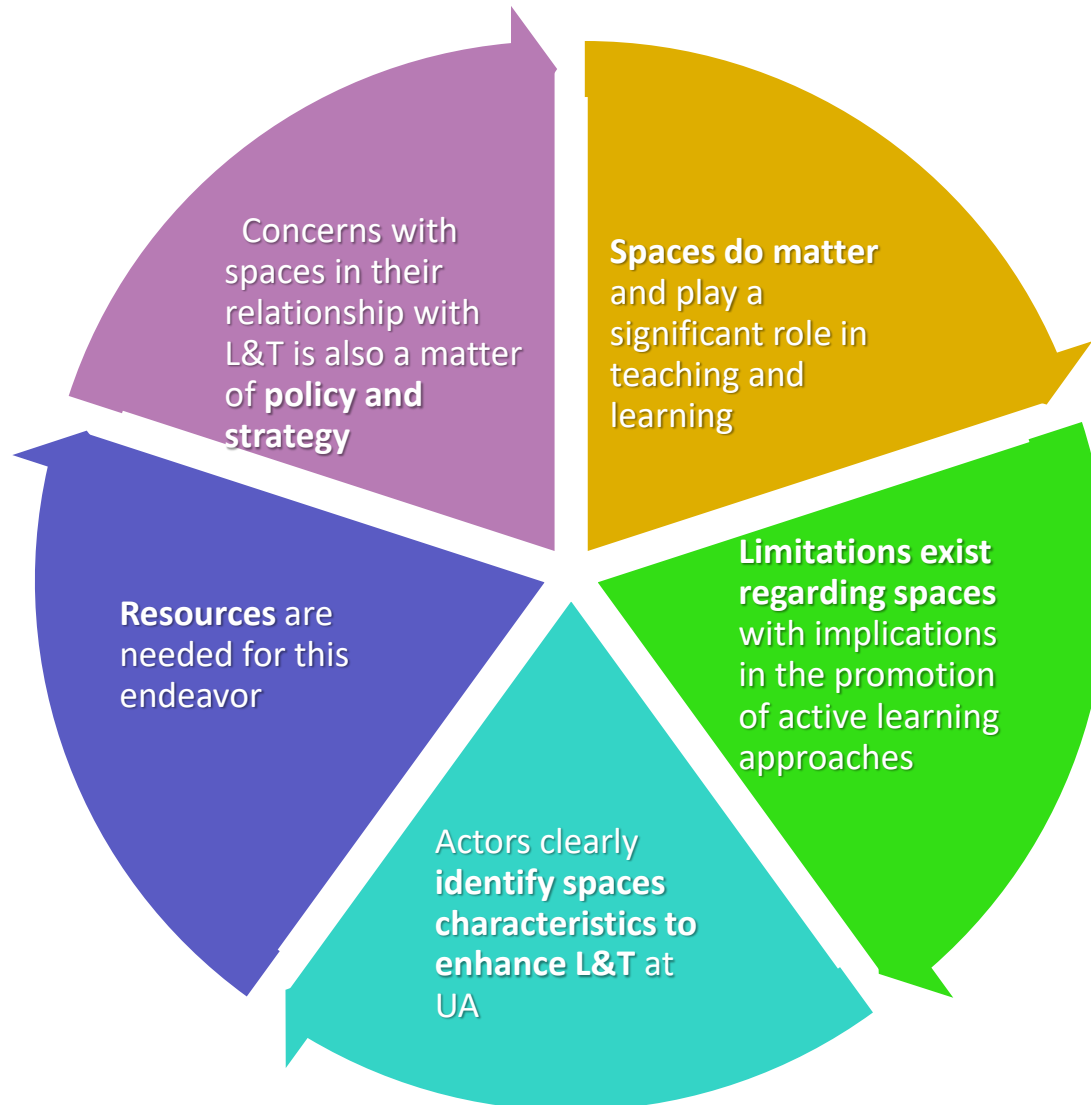
- **Pedagogic innovation** requires **teachers training**, as well as an **adaptation of the university's existent L&T spaces** and a reduction in the number of students by class
- **Training** should be offered for teachers in the **use of innovative spaces**
- **Physical comfort** (e.g. acoustics, temperature, and light), **flexibility** (meaning the possibilities of quickly changing the furniture position) and the existence of **multiple sources of power supplies** are paramount
- **Spaces** for students' **autonomous work** and **social spaces** (e.g. cafés and bars) are highly important to create **residency in the campus**, which is considered both by teachers and students as fundamental for academic performance
- **Exterior spaces** are relevant to promote staff and students' wellbeing at the university and should be equipped with **exterior furniture**



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## CONTACTS

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Thank you! Questions?

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