

L-Università
ta' Malta

Active-based learning in higher education

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UPSKILLS Multiplier Event
30th May 2023





Quality Education

Source: United Nations, *The Sustainable Development Goals Report, 2022*, p.6

4 QUALITY EDUCATION



Education enables upward socioeconomic mobility and is a key to escaping poverty. Over the past decade, major progress was made towards increasing access to education and school enrollment rates at all levels, particularly for girls. Nevertheless, about 260 million children were still out of school in 2018 – nearly one fifth of the global population in that age group. And more than half of all children and adolescents worldwide are not meeting minimum proficiency standards in reading and mathematics.

In 2020, as the COVID-19 pandemic spread across the globe, a majority of countries announced the temporary closure of schools, impacting more than 91 per cent of students worldwide. By April 2020, close to 1.6 billion children and youth were out of school. And nearly 369 million children who rely on school meals 🍲 needed to look to other sources for daily nutrition.

Never before have so many children been out of school at the same time, disrupting learning and upending lives, especially the most vulnerable and marginalised. The global pandemic has far-reaching consequences that may jeopardize hard won gains made in improving global education.

<https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-4-quality-education.html>



Entitlement

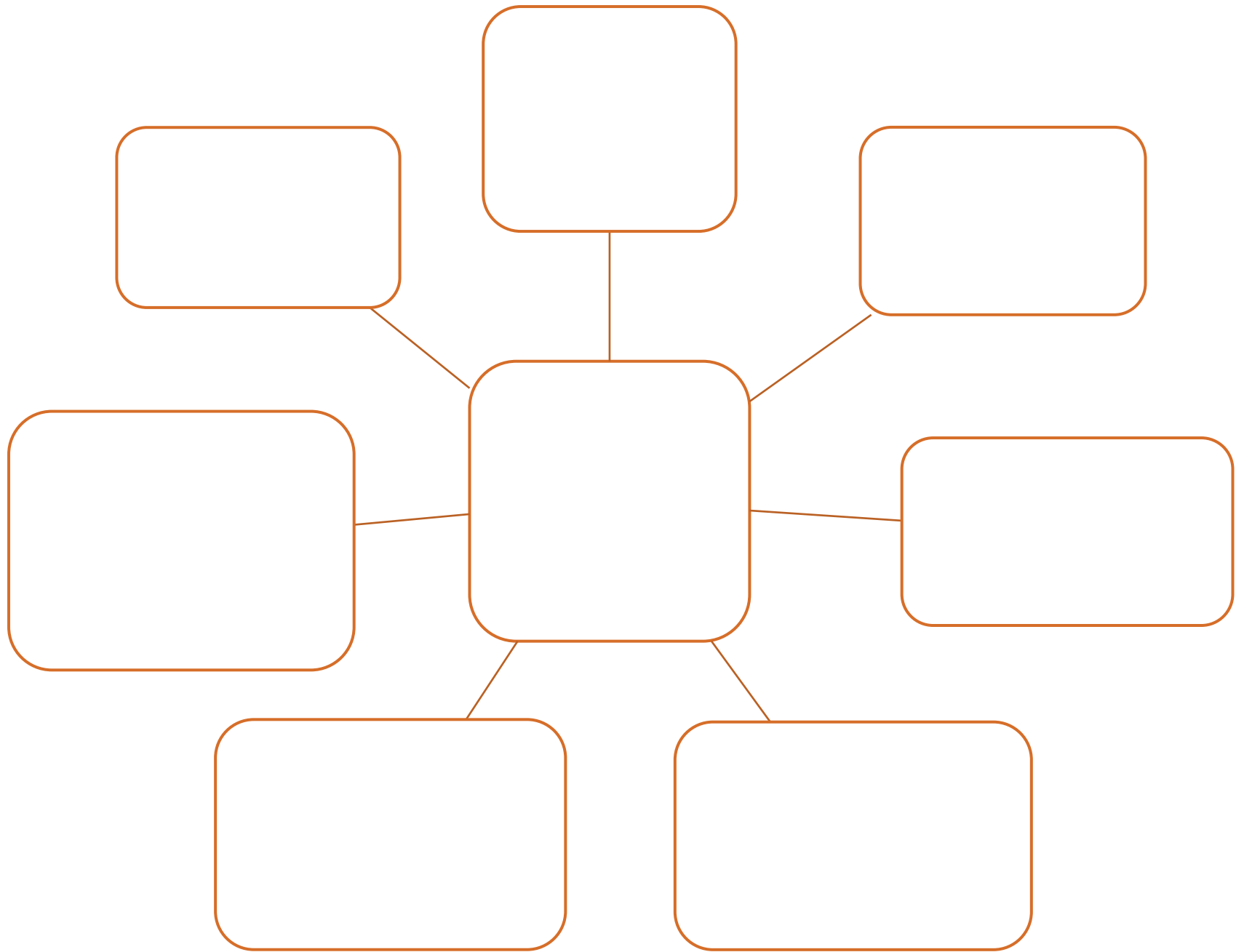
Effectiveness

Equity

Economy

Empowerment

Sultana R.G. (2002) Quality Education and Training for Tomorrow's Europe. In: Nóvoa A., Lawn M. (eds) *Fabricating Europe*. Springer, Dordrecht. https://doi.org/10.1007/0-306-47561-8_9



Active learning

Agency -

“persistence and decision-making, such as on how to finish tasks and act on opportunities, even when difficulties occur” (Bandura 2006)

Student agency

Maria Hvid Stenalt & Berit Lassesen (2022) “Does student agency benefit student learning? A systematic review of higher education research”, *Assessment & Evaluation in Higher Education*, 47:5, 653-669, DOI: 10.1080/02602938.2021.1967874

Careful scaffolding and supports for students to undertake rich, engaging, authentic tasks, creating zones of proximal development for rich learning through active inquiry and strategic, explicit instruction.

Learning Policy Institute & Turnaround for Children, (2021), *Design principles for schools: Putting the science of learning and development into action*.

https://k12.designprinciples.org/sites/default/files/SoLD_Design_Principles_REPORT.pdf

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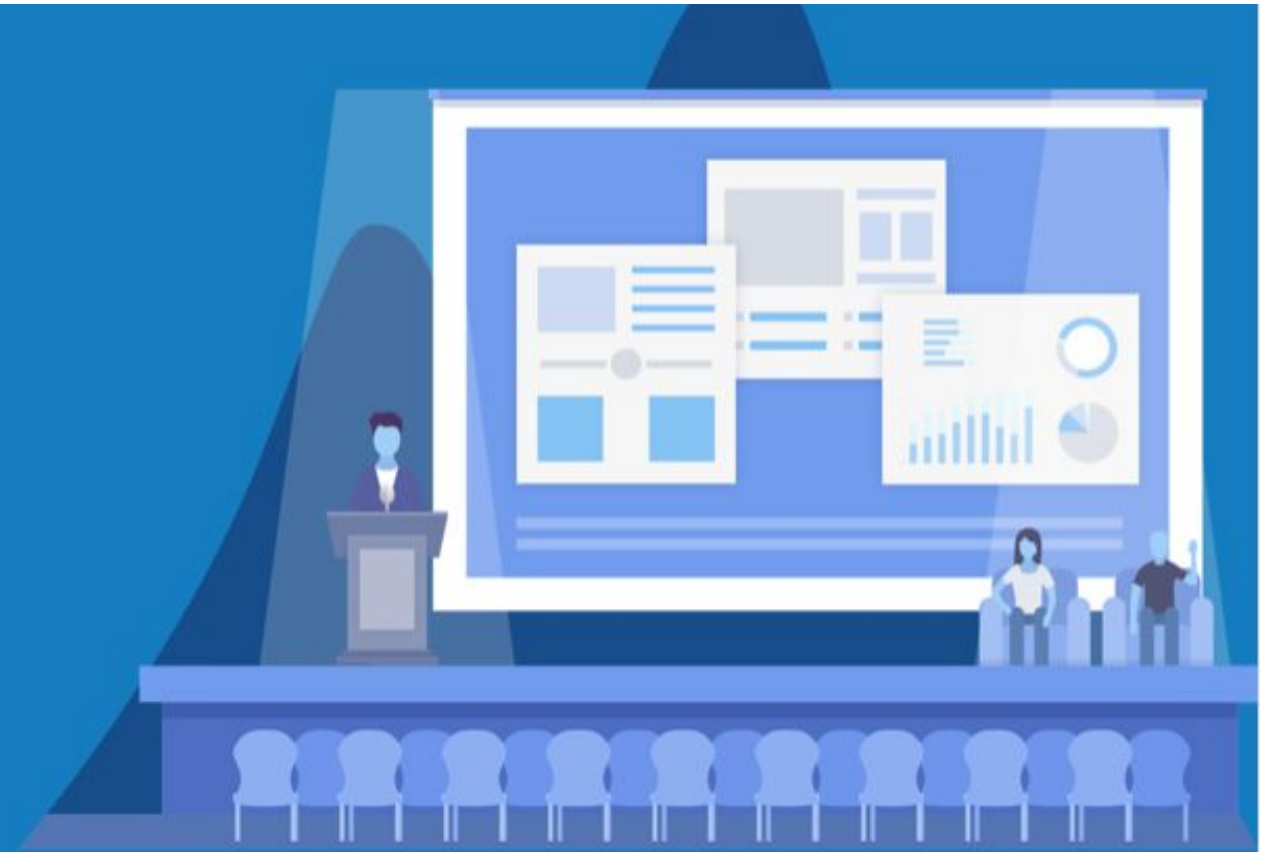
Learning Policy Institute & Turnaround for Children, (2021), Design principles for schools: Putting the science of learning and development into action.

https://k12.designprinciples.org/sites/default/files/SoLD_Design_Principles_REPORT.pdf

UPSKILLS Project

UPgrading the SKIlls of Linguistics and Language Students

The UPSKILLS project is an Erasmus+ strategic partnership for higher education that seeks to identify and tackle the gaps and mismatches in skills for linguistics and language students through the development of a new curriculum component and supporting materials to be embedded in existing programmes of study.



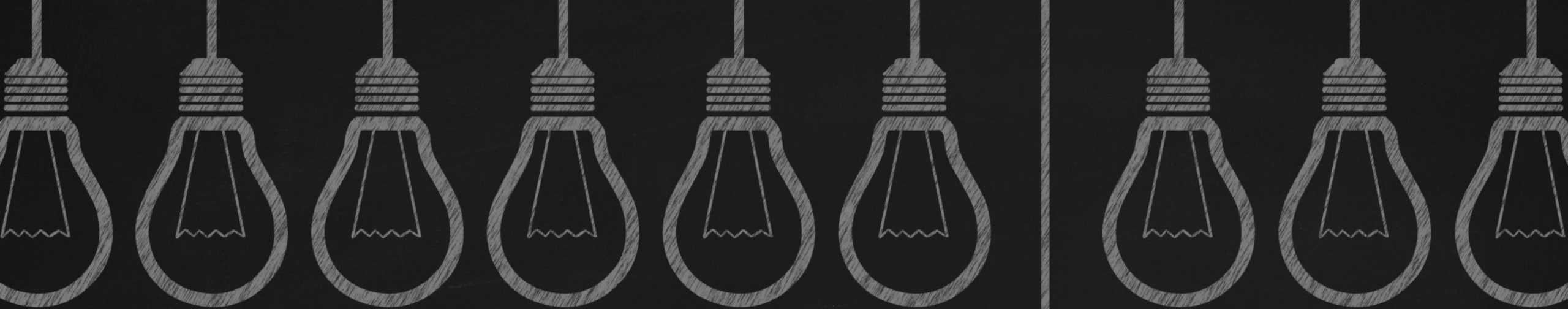
Which barriers to student active learning are identified in research on university campus development and technology use in higher education?

- Kristin Børte, Katrine Nesje & Sølvi Lillejord (2023), “Barriers to student active learning in higher education”, *Teaching in Higher Education*, 28:3, 597-615, DOI: 10.1080/13562517.2020.1839746

Table 1. Barriers to student active learning.

Barriers	Description
Physical barriers (Kok, Mobach, and Omta 2015; Nordquist, Sundberg, and Laing 2016; Siegel and Claydon 2016; Wilson and Randall 2012; Lee, Morrone, and Siering 2018)	Barriers related to architecture, spatial design, furniture and its placement obstructing student's view or separating teachers from students. Everything signals one-way knowledge transmission.
Institutional barriers (Fernandes 2014; Maringe and Sing 2014; Shelton 2017; Sinclair and Aho 2018; Walker, Jenkins, and Voce 2017; Vlachopoulos and Makri 2017; Witton 2017)	Barriers related to large and small student groups, teachers' workload, work context, lack of time, departmental/school culture, funding, and commitment of academic staff.
Pedagogical barriers (Barak 2017; Newland and Byles 2014; Sinclair and Aho 2018; Wanner and Palmer 2015; Zheng, Niiya, and Warschauer 2015)	Barriers related to pedagogical frameworks and approaches. There is too little innovation, professional development and personalisation of learning and assessment practices.
Teacher-related barriers (Kirkwood and Price 2013; Kinoshita, Knight, and Gibbes 2013; Lee, Morrone, and Siering 2018; Newland and Byles 2014, Sinclair and Aho 2018)	Barriers related to teachers' conceptions of teaching, logistical concerns and structuring of large classes, lack of digital competence in how to use technology and innovate teaching, lack of equipment. Also, professional vulnerability, extra workload, and stress due to expectations on student active teaching practice.
Student-related barriers (Blau and Shamir-Inbal 2017; Wanner and Palmer 2015; Zheng, Niiya, and Warschauer 2015)	Barriers related to students' expectations, the need for self-regulation, diffusion of responsibility and learners avoiding tasks, effort, lack of self-responsibility, and difficulties managing collaborative skills.
Technological barriers (Al Nashash and Gunn 2013; Shelton 2017; Sinclair and Aho 2018; Toven-Lindsey, Rhoads, and Lozano 2015; Vlachopoulos and Makri 2017; Wang 2017)	Barriers related to time, functionality of equipment and support staff, little training in the use of technical equipment, quality of digital tools, venue flexibility, and ICT-restrictions on university computers. Also, complexity of technological solutions and the constant development of solutions constitute barriers.
Teacher support to overcome barriers (Baepler, Walker, and Driessen 2014; Ellis and Goodyear 2016; Pates and Sumner 2016; Lee, Morrone, and Siering 2018; Newland and Byles 2014)	Professional support for teachers in new learning environments, rewarding innovation and risk taking. Using teaching assistants, and create a support structure that include collaboration, research and evaluation.

The UPSKILLS Learning Content



Innovation



- Automatic speech recognition and forced alignment
 - “ ... bridge between students with a linguistic background and Automatic Speech Recognition as a technical topic”
- The essence of machine learning for linguists in tech
 - “necessary for students of language or linguists who plan to work with engineers and scientists”

A collection of colorful wooden blocks in various shapes (crosses, L-shapes, rectangles) scattered on a wooden surface. The blocks are in shades of purple, blue, green, orange, red, pink, yellow, grey, brown, and tan. The text "Personalisation of Learning" is overlaid in the center in a white, sans-serif font.

Personalisation of Learning

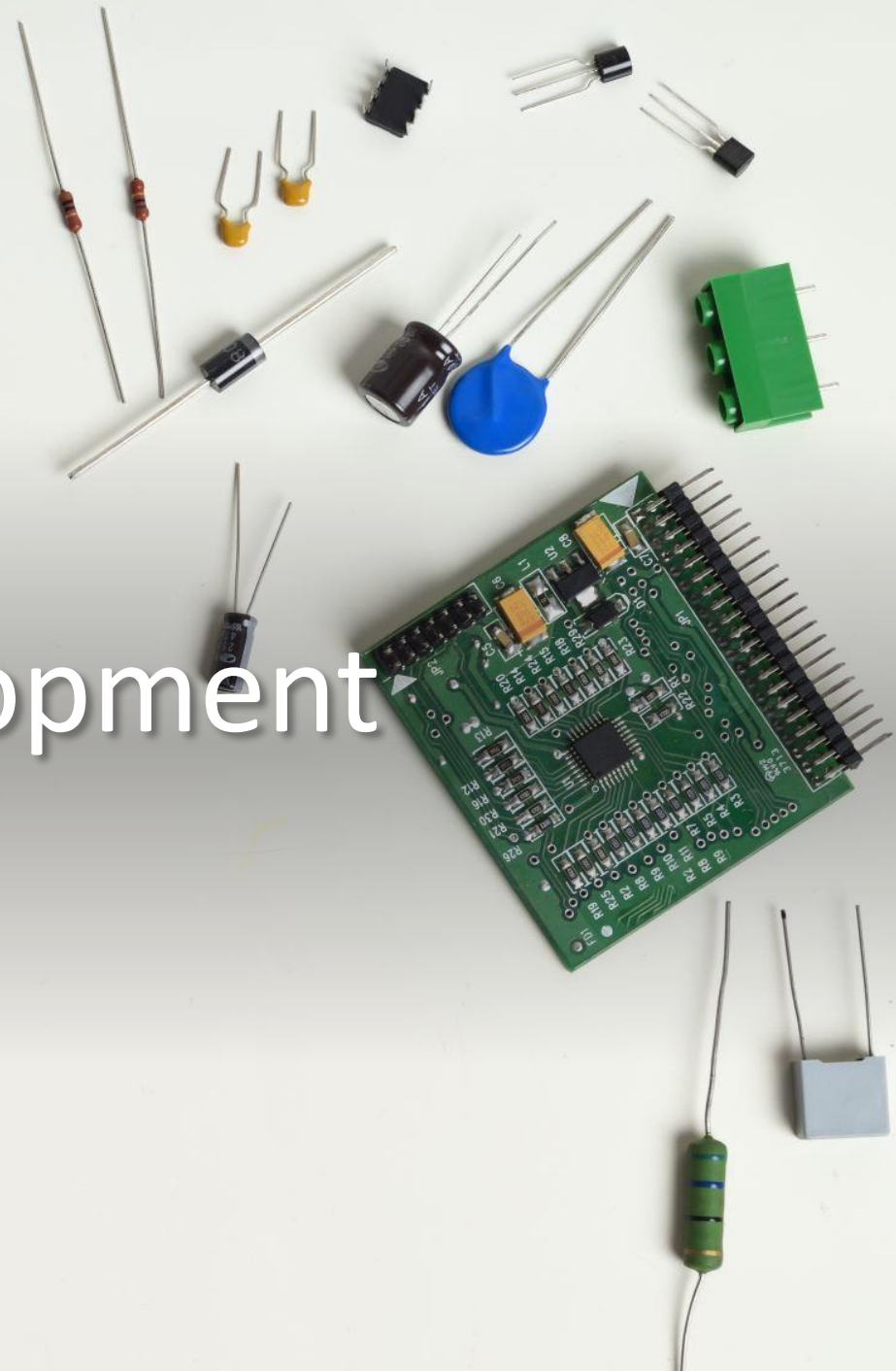
- Analytical thinking and problem solving
 - “the soft skills that help in identifying and solving complex problems”
- Processing texts and corpora
 - “a central aim of the course is also for students to develop research skills as well as organizational and interactional skills, these being of primary importance for the new generations of language specialists”

A blue ballpoint pen with a silver-colored tip and barrel accents is positioned diagonally across the upper left portion of the image. The pen is resting on a document that features a bar chart with several blue bars of varying heights. The background is a light blue, slightly blurred surface, possibly a desk or a large sheet of paper. The overall lighting is soft and even, highlighting the texture of the paper and the metallic sheen of the pen.

Assessment practices

Each 'block' included in the UPSKILLS learning content is accompanied by learning outcomes, so they are based on an outcomes-based approach to education.

Professional development



The most striking finding across the systematic reviews was the discrepancy between how academics work when they conduct research and when they teach. While research is increasingly practiced as border-crossing, collective knowledge-using and knowledge producing activities that need a supporting infrastructure to succeed, teaching is treated as a local, less knowledge-intensive, individual activity that does not require extensive training or support structures.

Kristin Børte, Katrine Nesje & Sølvi Lillejord (2023), "Barriers to student active learning in higher education", *Teaching in Higher Education*, 28:3, 597-615, DOI: 10.1080/13562517.2020.1839746



A final reflection



Innovation

Personalisation
of Learning

**ACTIVE
LEARNING**

Assessment
Practices

Professional
Development


Quality in education


Grazzi ħafna tal-attenzjoni!



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