Digitally Enhanced Learning

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Digitally Enhanced (Enabled) Learning

Henley Business School
UNIVERSITY OF READING

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WHAT IS DIGITALLY ENHANCED (ENABLED) LEARNING?

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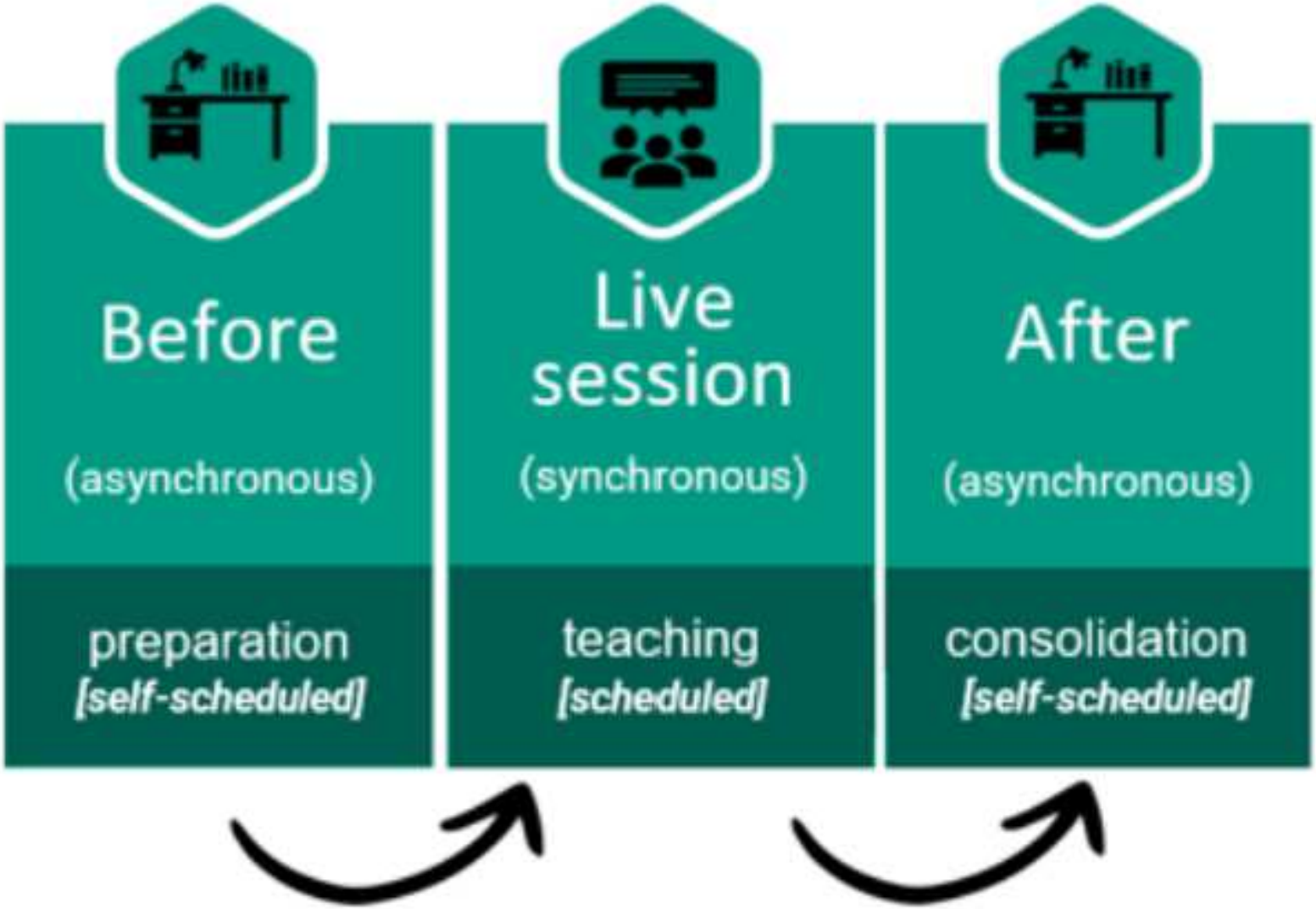
Digitally enhanced (enabled) learning means using digital tools and resources to create learning activities and experiences. Digitally enabled approaches, combined with in-person and non-digital approaches, can help to create an active, varied, flexible and inclusive learning environment.

Digitally enabled learning is more than providing access to online resources or opportunities to revisit and review content.

Digital tools and resources need to be:

- Intentionally used to provide scaffolded activities that students can interact and engage with.
- Designed to integrate with or support in-person teaching

DIGITALLY ENHANCED (ENABLED) LEARNING IN PRACTICE



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Definition

- Digitally Enhanced Learning (DEL) refers to any type of learning or teaching that is accompanied or supported by technology, such as computers, tablets, smartphones, software, applications, platforms, or online resources.

- DEL aims to improve the quality and efficiency of education, as well as to facilitate access and equity of opportunities for all learners.

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Benefits of DEL

- 1st Provide personalized learning experie
  preferences, and interests.
  - DEL can use various technologies, such a
    learning, learning analytics, or recommer
  - to collect, analyze, and interpret data abo
  - and to provide them with customized cor
    suggestions.

For example, intelligent tutoring systems (ITS) are computer programs that act as virtual tutors, mentors, or companions, offering information, instruction, support, or feedback to learners, according to their individual needs and goals

- y and innovation of learners and teachers, by
  sources to generate new ideas, products, or

For example, CoSpaces Edu is a platform that allows learners and teachers to create and share their own virtual and augmented reality experiences, using a simple drag-and-drop interface and a coding tool.

nologies, such as virtual reality, augmented
s, or natural language processing, to create
nd flexible learning environments that stimulate
, and exploration of learners and teachers.

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Benefits of DEL

- Third. Improve the collaboration an
  teachers, by facilitating the interacti
  among them.
  - With technologies, such as chat,
    file sharing, to enable and suppo
    cooperation among learners and
    time, or language.

[For example, Mentimeter is a tool that allows learners and teachers to create and participate in interactive presentations, quizzes, polls, or surveys, using their smartphones, tablets, or laptops[4].]

- Fourth. Increase the diversity and inclusion of learners and teachers, by respecting and valuing their differences and needs.

ologies, such as accessibility,
ndation features, to ensure that all learners
participate in education, regardless of their
eferences.

For example, Microsoft Learning Tools is a set of features that help learners and teachers improve their reading, writing, speaking, and listening skills, by providing options such as text-to-speech, speech-to-text, immersive reader, or translator.

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Three main Challenges and risks of DEL

- **Technical**:
  - The cost and accessibility of the technology and the infrastructure
  - A limitation of DEL availability and quality (developing countries?).
- **Pedagogical** :
  - The quality and availability of the content and the activities
    - Large variation depending on the source, the provider, or the platform
    - Disconection with the curriculum, the standards, or the objectives of the education system.
- **Ethical**
  - Data privacy and security, in…
    - Collection, use, and sharing of sensitive data about learners and teachers, and may expose them to risks of hacking, manipulation, or misuse.
    - Bias, transparency, and accountability, which may arise from the design, development, and implementation of the technology and the algorithms, ➔ affecting decisions, outcomes, and impacts of DEL on learners and teachers[56].

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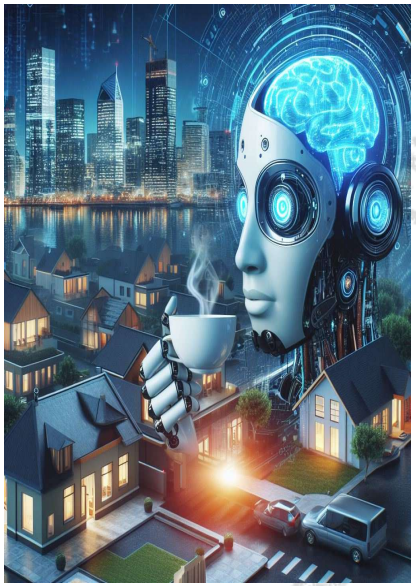
Artificial versus human intelligence?



AI is not better than human intelligence, as both have their own strengths and weaknesses:

- Artificial intelligence is based on algorithms and mathematical models, while human intelligence is based on cognitive processes and biological structures
- Artificial intelligence can process data and perform tasks much faster than humans, while human intelligence has creativity, intuition, and emotional intelligence that artificial intelligence lacks
- Artificial intelligence is limited by its programming and may not be able to adapt to new or unexpected situations, while human intelligence can adapt to new and unexpected situations
- Artificial intelligence may pose ethical concerns about bias, privacy, security and accountability, while human intelligence can provide ethical and moral considerations in decision-making

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Pro and Cons

• Pros:

1. **Personalized Learning:**
2. **Efficiency in Assessment and tasks:** instant feedback, correct mistakes, automate repetitive tasks…
3. **Enhanced Engagement:** creativity and innovation
4. **Accessibility:** offering tailored resources and support.
5. **Data-Driven Insights:** AI analytics
6. **Availability:** collaboration
7. **Global Learning Communities:**
8. **Adaptive Content Recommendations:**

• Cons:

1. **Privacy and ethical Concerns:**.
2. **Bias in Algorithms:**
3. **Dependence on Technology**.
   2. Hinder the critical thinking skills of students rather than encouraging them to explore and discover on their own
4. **Initial Implementation Costs:**
5. **Lack of Human Connection:**
6. **Limited Emotional Intelligence:**
   4. Lack human-like creativity and empathy, by being unable to generate original and diverse content or understand and respond to the emotions and needs of students and teachers
7. **Potential Job Displacement:**
8. **Technical Issues and Dependence:**
   - Technical glitches, system failures, or a lack of technical proficiency can impede the effectiveness of AI-driven education systems.

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In Real Estate education

- Increasingly used
- Due to the particular complexity of this sector
- Need in several of the related sectors: planning, property rights, valuation, market information, regulation….

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Trends of DEL in education

- The use of artificial intelligence (AI) to enhance the learning and teaching processes, by providing personalized, adaptive, and interactive learning experiences, as well as instant feedback, guidance, and support[12].
    - For example, **this presentation**.
- The use of virtual reality (VR), augmented reality (AR), flipped classrooms, and blended learning, to create immersive, interactive, and flexible learning environments that combine online and offline elements[3].
    - For example, Labster is a VR-based platform that allows learners and teachers to access and perform virtual laboratory experiments, using realistic simulations and scenarios.
- The use of collaborative learning tools and instruction design, when two or more people work together to achieve a common goal.

- For example, Padlet is a tool that allows learners and teachers to create and share online boards, where they can post and comment on text, images, videos, or links.

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Conclussions

- DEL is a term that refers to any type of learning or teaching that is accompanied or supported by technology, such as computers, tablets, smartphones, software, applications, platforms, or online resources.
- Aims to improve the quality and efficiency of education, as well as to facilitate access and equity of opportunities for all learners.
- It has many benefits, such as providing personalized, creative, collaborative, and inclusive learning experiences, but also some challenges, such as the technical, pedagogical, and ethical issues that need to be addressed and resolved.
- DEL is a field that is constantly evolving and expanding, with new technologies, methods, and examples emerging and being implemented in practice.

- **DO YOU AGREE? ANYTHING ELSE.** ☺

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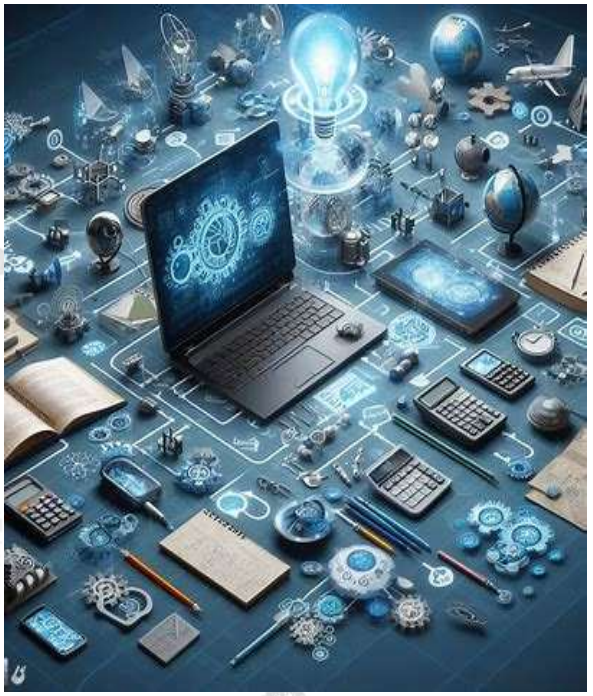
Source: network resources

provided by bing

Not provided by chatgpt



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Digitally Enhanced Learning

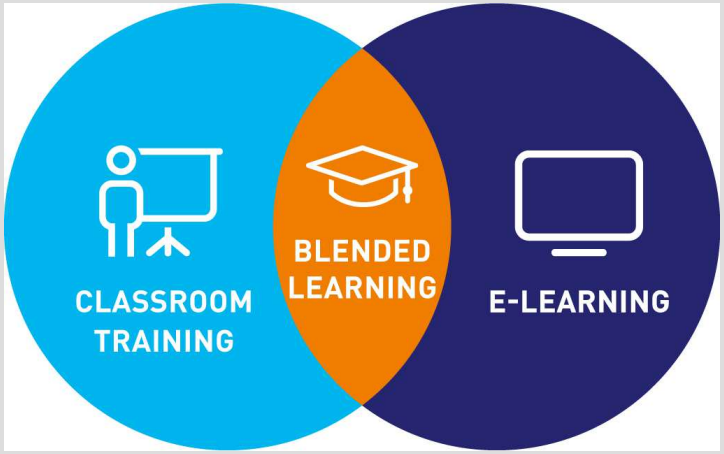
→ Blended Learning

- **Effectiveness** of the technology employed?
- Feelings of **disconnectedness**?
- Reduced levels of **engagement**?
- **Interaction** between students and between students and lecturers?

Blended Learning: Definition

- **Most commonly definition after Graham (2005): "Blended learning environments combine face-to-face instruction with technology-mediated instruction"**

- **Differences in interpretation and delivery ...**



Experiences - Context

Real estate executive education at TU Wien:

- **Small cohorts (approx. 15-30 students)**
- **Course work during off-peak business hours and weekends**
- **Fixed course schedule --> match education with professional activities**
- **Tuition fee driven**

TU WIEN ACADEMY FOR CONTINUING EDUCATION

Where do we go from here?

Digital Enhanced Learning will remain - and steadily grow

Reworking the delivery mode:

- → **Syllabus requires modifications**
- → **Consideration for which part(s), presence teaching is absolutely indispensable (or not)**