Technology-*Enhanced* Learning in Higher Education







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Advanced Use of Learning Technologies in Higher Education



DE - Ludwigsburg University of Education (LUE, Germany)



HU - John von Neumann University (JNU, Hungary)



IT - International Education and Training Institution (Pixel, Italy)



NL - Open University of the Netherlands (OUNL, Netherlands)



ES - Complutense University of Madrid (UCM, Spain)



FI - Humak University of Applied Sciences (Humak, Finland)





PT - Polytechnic Institute of Bragança (IPB, Portugal)





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Ezafus,



Known Barriers & Solutions to IT adoption

Guidelines for Effective Use of TEL Tools

Communities of Practice

Teaching Methods for TEL

Case Studies

https://sites.google.com/site/adulet_u/home/project-overview https://dev.adulet.eu/





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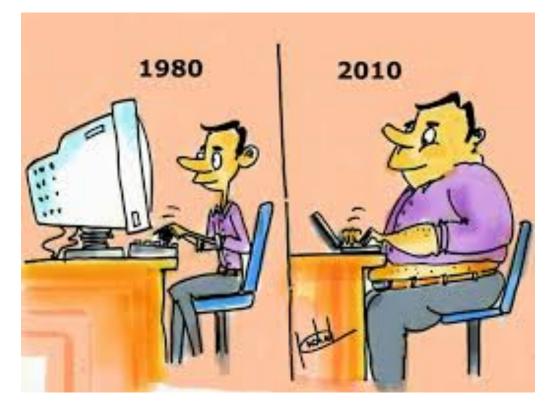
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TEL in HE: Where are we?



Technology-enabled learning? or Technology-enhanced learning?

Does technology enhance learning?



How can we *design technology* that enhances learning, and how can we *measure* that *enhancement*?

What essentially constitutes TEL? What is "enhanced"?

TEL connotes *value judgement* (Kirkwood & Linda, 2014)

What value is being added to learners' experiences in TEL?









Three levels of benefits TEL brings:

- 1. Efficiency: cost & time effectiveness; sustainable & scalable practices/ processes.
- 2. Enhancement: improve existing processes & outcomes.
- 3. Transformation: radical positive changes in existing processes and/ or innovate new processes





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Three types of interventions

- 1. Replicating teaching: conventional teaching delivered using some form of technology.
- Supplementing teaching: recorded lectures/ course components available online.
- 3. Transforming teaching: require redesigning activities & appropriation of technologies for qualitative changes in outcomes.

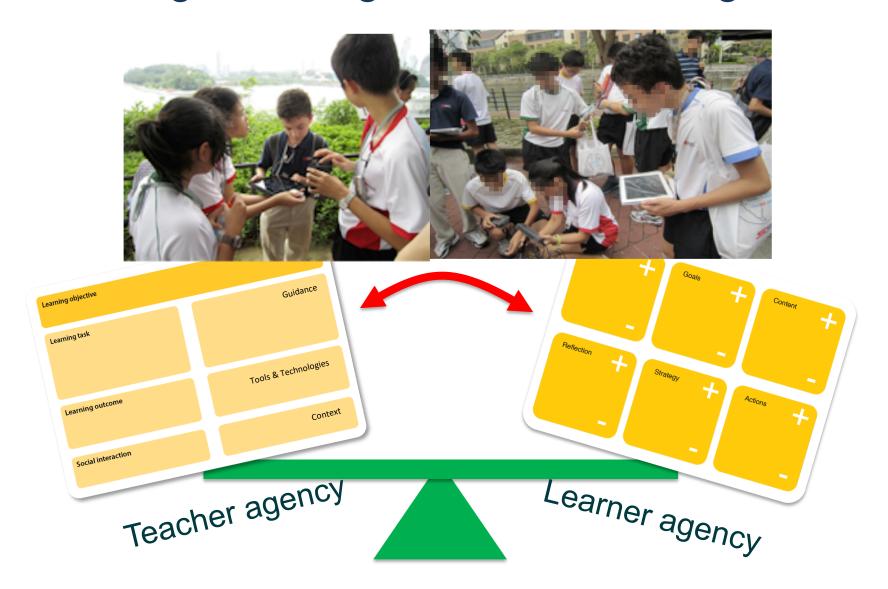








Singapore Future School Project: In-Situ Knowledge Building in Mobile Learning Trails



How can we harness technological affordances to *enhance* learning processes and outcomes *in different learning contexts* ?









Centre for Education and Learning

Thank You!





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Reference

- Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: what is 'enhanced'and how do we know? A critical literature review. Learning, media and technology, 39(1), 6-36.
- So, H. J., Tan, E., Y. Wei., & Zhang, X. J. (2015). What makes the design of mobile learning trails effective: A retrospective analysis (pp. 335-352). In L. S. Wong., M. Milard., & M. Specht. (Eds.), Seamless learning in the age of mobile connectivity, (pp.335 352). Singapore: Springer.
- So, H. J. & Tan, E. (2014). Designing the situation for pervasive knowledge building: Future school experiences. In Tan, S. C., So, H. J. and J. Yeo, J. (Eds.), Knowledge creation in education, (pp. 123-142). Springer.
- Tan, E. & So, H. J. (2018). Role of Environmental Interaction in Interdisciplinary Thinking: from Knowledge Resources Perspectives. The Journal of Environmental Education. DOI: 10.1080/00958964.2018.1531280
- Tan, E., So, H. J., & Zhang, X. J. (2012). Teacher Agency and Student Autonomy in an Inquiry-based Mobile Learning Trail. In the *proceedings of the 20th International Conference on Computers in Education* (ICCE), Nov 26 to 30, 2012, Singapore.