### **Course Description**

## MEDD6609 Information Technology and Educational Leadership

## **Course description**

This course provides students with the necessary knowledge and working methods to implement local IT policies and strategies at the institutional level. The course offers a comparative perspective for benchmarking local and international practices and identifies contemporary leadership issues concerning the implementation of information technology in education across multiple levels. It situates leadership issues within the broader literature on pedagogical innovation and educational change, and discusses contemporary leadership issues in the implementation of ICT in education at different levels of the education ecosystem.

Coursework / Examination ratio: 100 % Coursework, 0 % Examination

### **Course objectives**

On completion of the module, students should be able to:

- 1. Compare, contrast, and critique local policies and practices of integrating ICT in education with those in other countries, drawing on both general and ICT specific literature on leadership and change.
- 2. Demonstrate an understanding of leadership concepts and issues related to policies and strategies of ICT implementation at institutional and cross-institutional levels within broader system-level contexts of education.
- 3. Demonstrate critical reading of literature, the capacity to communicate, collaborate, manage time, and be a constructive team member (to lead and be led) as a self-directed learner.

Key concepts and issues about ICT and educational leadership that students are expected to understand after completing this module:

- Role of ICT in 21st-century education and the nature of ICT-enabled learning innovations
- ICT in Education policies in Hong Kong and other countries: history and current trends
- Conditions for ICT in education to bring about educational transformations
- Theories/models of educational changes and their implications for ICT in education policies
- Leadership concepts and issues related to policies and strategies of ICT implementation as interconnected levels of learning at the individual, institutional and system levels of education

Course learning outcomes	Aligned programme learning outcomes			
Compare, contrast, and critique local policies and practices of integrating ICT in			(PLOs)	
Compare, contrast, and criti- education with those in othe literature on leadership and	PLO 1			
Demonstrate understanding strategies of ICT implement developing an Online Learn	PLO 3			
3. Demonstrate understanding strategies of ICT implement analyzing a case study or wi	PLO 4			
4. Demonstrate critical reading time manage, and be a const self-directed learner	PLOs 2, 5			
Course assessment methods				
Assessment method	Type of assessment (e.g. description of assignment)	Weighting (%)	Aligned course learning outcome(s)	
Reading	Individual	15	CLOs 1, 3, 4	
Participation in the Course Discussion Forum	Individual	10	CLOs 1, 3, 4	
Writing portfolios	Individual	35	CLOs 1, 3	
Participate in a global	Group	15	CLOs 2, 4	

education innovation			
leadership network			
Project (TELIP)	Group	15	CLOs 2, 4
Group Wiki	Group	10	CLO 2

# Course content and topics

Role of ICT in 21st Century education

E-Learning policies as context dependent

E-Learning as pedagogical innovations

Different ways of conceptualizing and leading learning innovations

Models of teacher learning and the scalability of e-learning innovations

Architectures for learning and infrastructuring for sustainable innovation

E-Learning implementation as sociotechnical co-evolution and e-learning leadership

Technology and education systems as ecologies

### Required / recommended readings and online materials

There are key readings for each session. Some may be changed from year to year. The essential readings include:

Carretero, S.; Vuorikari, R. and Punie, Y. (2017). DigComp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use, EUR 28558 EN, doi:10.2760/38842

Coburn, C. E., & Penuel, W. R. (2016). Research–practice partnerships in education: Outcomes, dynamics, and open questions. *Educational Researcher*, 45(1), 48-54.

Clarke, J., & Dede, C. (2009). Design for Scalability: A Case Study of the River City Curriculum. *Journal of Science Education and Technology*, 18(4), 353–365. doi:10.1007/s10956-009-9156

Collins, A., & Halverson, R. (2010). The second educational revolution: Rethinking education in the age of technology. *Journal of Computer Assisted Learning*, 26(1), 18-27.

Erstad, O., & Voogt, J. (2018). The twenty-first-century curriculum: issues and challenges. *Second Handbook of Information Technology in Primary and Secondary Education*, 19-36. Springer.

Fishman, B. J., Penuel, W. R., Allen, A.-R., Cheng, B. H., & Sabelli, N. (2013). Design-based implementation research: An emerging model for transforming the relationship of research and practice. *National Society for the Study of Education*, 112(2), 136-156

Kozma, R. (2011). Chapters 1 & 2, A Framework for ICT Policies to Transform Education. In UNESCO (Ed.) *Transforming Education: The Power of ICT Policies*. Paris: UNESCO. Retrieved from http://unesdoc.unesco.org/images/0021/002118/211842e.pdf

Law, N., & Liang, L. (2019). Sociotechnical Coevolution of an eLearning Innovation Network. *British Journal of Educational Technology*, 50(3), 1340-1353.

Law, N., Kampylis, P., & Punie, Y. (2015). Multiple Pathways to Enhance Multilevel Learning for Scaling Up Systemic ICT-Enabled Learning Innovations: Lessons from 7 European and Asian Cases. In C. K. Looi & L. W. Teh (Eds.), *Scaling Educational Innovations* (pp. 197-223). Singapore: Springer.

Law, N., Yuen, A., & Fox, R. (2011). Educational Innovations Beyond Technology: Nurturing Leadership and Establishing Learning Organizations. Ch 1 & 11.

Prestridge, S., & Main, K. (2018). Teachers as Drivers of Their Professional Learning Through Design Teams, Communities, and Networks. In J. Voogt, G. Knezek, R. Christensen, & K. W. Lai (Eds.), *Second Handbook of Information Technology in Primary and Secondary Education*. New York: Springer International Publishing.

Rogers, E. M. (1983). Diffusion of innovations (3rd ed.). Ch. 1. New York: The Free Press.

Stein, M. K., & Coburn, C. E. (2008). Architectures for learning: A comparative analysis of two urban school districts. *American Journal of Education*, 114(4), 583-626.

Wenger, E. (1998). Communities of practice: Learning as a social system. Systems Thinker, 9(5), 1-10.

### Other additional course information

Nil