

Education Policy and Technology (MA)

Aim of training

Aim of the study program:

The purpose of this course is to provide students with a basic framework to understand, create and evaluate educational technology policy at macro, meso and micro levels with special focus on school development, leadership and teacher professional development. During the course, students will examine their own national educational systems through the lens of the implementation of educational technology, identify problems within the systems and develop an educational technology policy document. On the long run, this course contributes to the development of educational professionals who will be able to transform educational institutions and systems to better serve the needs of the knowledge society by becoming more effective and efficient in developing 21st century skills.

Expected learning outcomes and related competencies

Knowledge:

On successful completion of this course, students will:

- develop a basic understanding of contextual, supporting and hindering factors of implementing technology into (inter)national education systems
- describe the basic elements of a national educational technology policy
- identify research and evidence-based solutions for technology-integrated education

Skills:

By the end of the course, students will be able to:

- create and evaluate a national educational technology policy
- apply their knowledge regarding macro- and meso-level factors in school, leadership and teacher professional development

Attitude:

Students will develop:

- drive for complex and holistic thinking
- critical and reflective approach towards technology in education

Main topics

Main contents

1. Global and international trends and developments in education with a focus on educational technology
2. Educational technology policy: OECD Innovative Learning Environments, World Bank SABER-ICT National Educational Technology Policies, ISTE Standards
3. Preparing teachers and developing school leaders for the 21st Century: 21st century skills, school as learning organization, leading learning schools, Professional Learning Communities

4. Supporting innovation and fostering the implementation of top-down and bottom-up initiatives in education

Planned teaching and learning activities

Utilizing project-based learning the course requires students to work in groups focusing on a specific national educational contexts and problems which are based on their initial assessments and to develop an educational policy report.

Week 1: Introduction to the OECD Innovative Learning Environment Framework

Task between week 1 and week 2: Students individually or in groups assess their own national education system according to the ILE 7+3 framework indicators

Week 2: ILE Market (students present their assessment of their own national education system); introduction the World Bank SABER-ICT policy framework; group formation based on the presentations, groups develop a shared understanding of the educational context and problems and starts to develop a project plan for the semester

Task between week 2 and week 3: Project team formation (tasks, timetable, responsibilities, resources, interim products)

Week 3: Preparing Teachers and Developing School Leaders for the 21st Century (learning organization, professional learning communities, ISTE Standards)

Task between week 3 and week 4: Project teams create a table of contents for their policy report

Week 4: Project team developing a draft based on SABER-ICT Policy Framework areas 1-3.

Task between week 4 and week 5: Project teams submit the draft (areas 1-3) of their policy report

Week 5: Teams presenting their drafts and receive feedbacks from teacher and peers

Task between week 5 and week 6: Project teams improve their drafts based on feedback

Week 6: Project team developing a draft based on SABER-ICT Policy Framework areas 4-6.

Task between week 6 and week 7: Project teams submit the draft (areas 4-6) of their policy report

Week 7: Teams presenting their drafts and receive feedbacks from teacher and peers

Task between week 7 and week 8: Project teams improve their drafts based on feedback

Week 8: Project team developing a draft based on SABER-ICT Policy Framework area 7, 8 and X.

Task between week 8 and week 9: Project teams submit the draft (areas 7, 8 and X) of their policy report

Week 9: Teams presenting their drafts and receive feedbacks from teacher and peers

Task between week 9 and week 10: Project teams improve their drafts based on feedback

Week 10: Teams finalize their policy reports and prepares for presentations

Task between week 10 and week 11: Project teams submit their final reports

Week 11: Teams presentations of the final results

Week 12: Teams presentations of the final results

Task between week 12 and week 13: Project teams evaluate each other's policy reports

Week 13: Discussing the results of the evaluation and the issues of implementation and innovation

Task between week 13 and 14: Based on the evaluation and feedbacks project teams finalize their policy reports.

Week 14: Wrap-up, closing, final feedbacks on the whole semester and reflections

Task after week 14: Creating individual project reports evaluating their own and their teams' performance.

Evaluation

Requirements, type and aspects of evaluation

Each of the following assignments will be given a grade and weighted as follows:

Assessment of own national education system based on the OECD ILE indicators (10%)

Project plan (5%)

Policy report (50%)

Policy report evaluation (20%)

Project report (15%)

Through the semester the different milestones and interim products will be assessed by formative evaluation tools and receive feedback from the teacher and peers as well. The final assessment will contain the evaluation of peers (policy report evaluation) and the reflection of the teacher on the policy report on the group level and final grade will be given on the group level as well (with the option for the project team to request for another option).

Course grades:

5 (100-90%),

4 (90-80%),

3 (80-70%),

2 (70-60%),

1 (below 60%)

Reading

Required reading

Kools, M. and Stool, L. (2016): *What makes a School a Learning Organization?*. OECD Education Working Papers, No. 137, Paris, France: OECD Publishing. Available at: <http://dx.doi.org/10.1787/5jlwm62b3bvh-en>

OECD (2013): *Innovative Learning Environments*. Paris, France: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264203488-en>

OECD (2013): *Leadership for 21st Century Learning*. Paris, France: OECD Publishing. Available at: <http://dx.doi.org/10.1787/9789264205406-en>

OECD (2015): *Schooling Redesigned. Towards Innovative Learning Systems*. Paris: OECD Publishing. Available: <http://dx.doi.org/10.1787/9789264245914-en>

OECD (2017): *The OECD Handbook for Innovative Learning Environments*. Paris: OECD Publishing. Available: <http://dx.doi.org/10.1787/9789264277274-en>

Schleicher, A. (2012, ed.): *Preparing Teachers and Developing School Leaders for the 21st Century: Lessons from around the World*. Paris: OECD Publishing. Available: <http://dx.doi.org/10.1787/9789264174559-en>

Trucano, M. (2016): *SABER-ICT Framework Paper for Policy Analysis. Documenting national educational technology policies around the world and their evolution over time*. World Bank Education, Technology & Innovation: SABER-ICT Technical Paper Series (#01). Washington DC: The World Bank. Available: http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/Background/ICT/112899-WP-SABER-ICTframework-SABER-ICTno01.pdf

Suggested reading:

Huang, R., Kinshuk, and Price, J. K. (2016, eds.): *ICT in Education in Global Context. Comparative Reports of Innovations in K-12 Education*. Berlin, Heidelberg: Springer Berlin Heidelberg.

Zhang, J., Yang, J., Chang, M., and Chang, T. (2016, eds.): *ICT in Education in Global Context. The Best Practices in K-12 Schools*. Singapore: Springer Singapore.

Cerna, L. (2013): *The Nature of Policy Change and Implementation: A Review of Different Theoretical Approaches*. Paris: OECD Publishing. Available: <http://www.oecd.org/edu/cei/The%20Nature%20of%20Policy%20Change%20and%20Implementation.pdf>

Groff, J. (2013): *Technology-rich Innovative Learning Environments*. Paris: OECD Publishing. Available: <http://www.oecd.org/edu/cei/Technology-Rich%20Innovative%20Learning%20Environments%20by%20Jennifer%20Groff.pdf>

Ronau, R. N., Rakes, C. R., and Niess, M. (2012, eds.): *Educational technology, teacher knowledge, and classroom impact: a research handbook on frameworks and approaches*. Hershey, PA: Information Science Reference.

World Bank EduTech Blog: <https://blogs.worldbank.org/edutech/category/tags/saber-ict>