



OULUN YLIOPISTO
UNIVERSITY of OULU

DESIGNING TECHNOLOGY-ENHANCED LEARNING IN GLOBAL SCHOOL SYSTEMS



SCHEDULE FOR TODAY

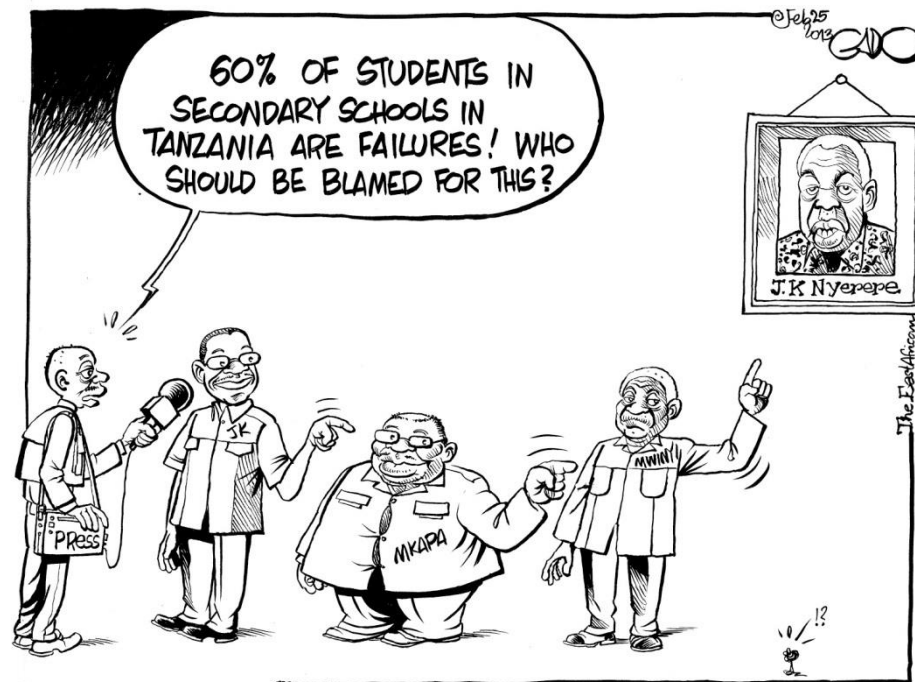
10.15-14.00

- Orientation to the topic:
Education, Global approach
- Lunch break: 11-11.45/12-12.45?
- Working with your own case and
presentation of your findings



EDUCATION IN GLOBAL CONTEXT

What are the factors that define and affect education worldwide?



EDUCATION IN GLOBAL CONTEXT

Societal structures, economics and political contexts of society:

- Culture, values: what do we consider important?
- Whose values are we teaching?
- Western ethnocentrism: Our country and values are the most important and superior to others
- For example: consider history or geography curriculums. How can they be affected?



EDUCATION IN GLOBAL CONTEXT

Political structures, government and politics:

- Trade, labour, market structures
- Educational Policy, curriculum
- Where does the funding for education come from?
- Public/private schools
- Social equity/inequity: Is education a choice?

Equal access to schools



EDUCATION IN GLOBAL CONTEXT

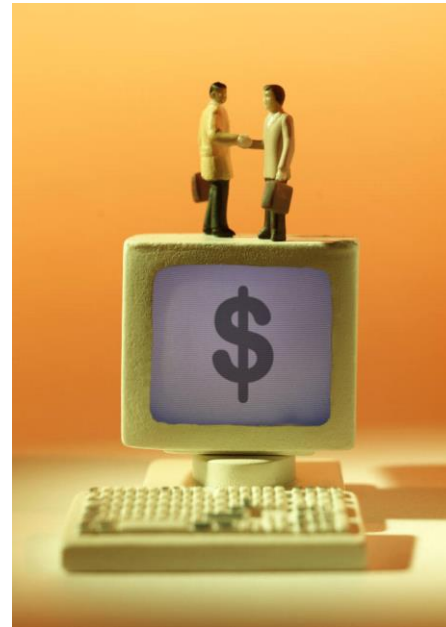
Major change in the society: from nation state to global contexts?

- **Globalisation, defined by Thomas Larsson (2001):**
”is the process of world shrinkage, of distances getting shorter, things moving closer. It pertains to the increasing ease with which somebody on one side of the world can interact, to mutual benefit, with somebody on the other side of the world.”



EDUCATION IN GLOBAL CONTEXT

- What is the role of education in this new world?
- New industry, commerce, technological and economical structures?



EDUCATION IN GLOBAL CONTEXT

- Significant shift in society creates a demand for change in learning and education
 - What do we need to consider?
- <https://www.youtube.com/watch?v=Ax5cNlutAys>



21ST CENTURY SKILLS

- Ways of thinking
- Ways of Working
- Tools for working
- Living in the world



"It's called 'reading'. It's how people install new software into their brains"

21ST CENTURY SKILLS: WAYS OF THINKING

Ways of Thinking: conceptualized, greater focus and reflection

1.) Creativity and innovation

- Knowledge of creation techniques
- Ability to think creatively, foster new ideas, and implement innovations



21ST CENTURY SKILLS: WAYS OF THINKING

1.) Creativity and innovation

- Work creatively in collaboration with others
- Being open to new ideas and diverse perspectives
- Seeing failure as an opportunity to learn

Discuss: Can you come up with a recent innovation that has had a major impact globally?



21ST CENTURY SKILLS: WAYS OF THINKING

2.) Critical thinking, problem solving and decision making

- Effective reasoning, systematic thinking, understanding the importance of evidence
- Identifying gaps in knowledge, ability to ask significant questions
- Ability to analyze and evaluate information and evidence
- Ability to explain and reflect critically
- Ability to self-regulate, evaluating one's own biases

- Already are an important part of many curriculums, especially when it comes to science
- Evaluated in many International assessments, such as PISA in some subjects



21ST CENTURY SKILLS: WAYS OF THINKING

3.) Learning to learn and metacognition

- Knowledge about one's own learning, strengths and weaknesses
- Knowledge education opportunities
- Positive attitude towards learning
- Ability to manage one's own learning and learning process



21ST CENTURY SKILLS: WAYS OF WORKING

Ways of Working: A great change in how we work, decentralized decisionmaking, working in teams possibly with long geographical distances, intercultural collaboration

1.) Communication

- Knowledge of mother tongue and additional languages
- Ability to listen, read and write effectively and respectively towards others
- Intercultural communication



21ST CENTURY SKILLS: WAYS OF WORKING

2.) Collaboration and teamwork

- Ability to interact *effectively* with others
- Ability to interact *respectively* with others
- Ability to manage projects, guide and lead teams
- Ability to work in culturally diverse teams



21ST CENTURY SKILLS: TOOLS FOR WORKING

Tools for working: A major change has happened in recent years: The importance of ICT is remarkable in society and affects on individual and societal level

ICT and technology as entertainment, communication, working, accessing information etc..

Discussion time: Can you think of an event happened that has been impacted by ICT?



21ST CENTURY SKILLS: TOOLS FOR WORKING

1.) Information literacy

- Ability to access information both efficiently and effectively
- Ability to apply information and evaluate it's reliability and validity critically
- Ability to use technology as a tool to access, research, and manage information
- Create information with technology , use technology in communication with safe and responsible ways



21ST CENTURY SKILLS: TOOLS FOR WORKING

2.) ICT literacy: the impact of technology in education:

- Ability to use and produce information beyond traditional readings and writings
- Ability to use the main applications and communication
- Ability to evaluate ICT and information efficiently, effectively and critically
- Ability to manage the information flow and know how to use it
- Ability to understand individual and cultural approaches to messages
- Ability to understand the role of media and legal and ethical issues related to ICT



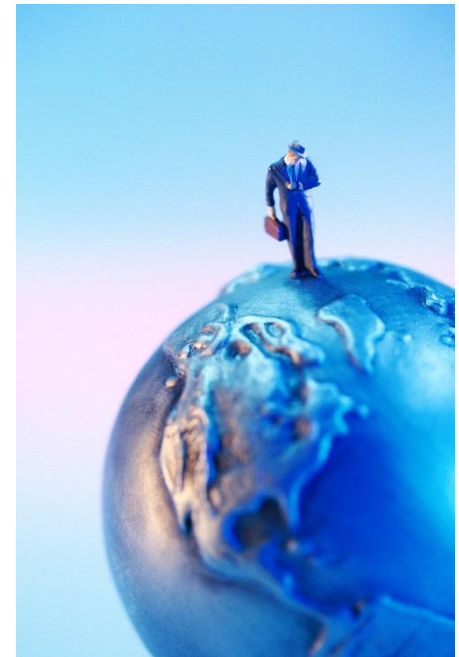
21ST CENTURY SKILLS: LIVING IN THE WORLD

The major change in the society inevitably affects our lives, e.g. mobility of work

World is just around the corner!

The role of growing trade and commerce?

Citizenship as a competence and responsibility?



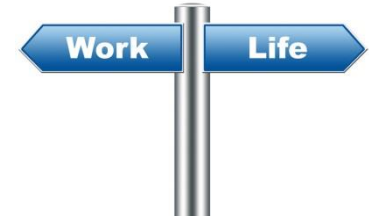
21ST CENTURY SKILLS: LIVING IN THE WORLD

1.) Global and Local citizenship

- Knowledge of civil rights and constitution of one's own country
- Ability to understand main policy-making processes in local and global level
- Knowledge and understanding of key components: democracy and international declarations
- Ability, interest and willingness to participate in democratic processes
- Acceptance of the concepts democracy, human rights and equality (gender, religious, ethnic etc.)



21ST CENTURY SKILLS: LIVING IN THE WORLD



2.) Life and career

- Ability to change: changing society, changing schedules, diverse views, intercultural surroundings
- Ability to flexibility: dealing with constant feedback, accepting uncertainty
- Ability to develop oneself constantly: self regulation, self-direction
- Ability to commit to learning as lifelong process



21ST CENTURY SKILLS: LIVING IN THE WORLD

3.) Personal and social responsibility

- Knowledge of one's own culture and other cultures
- Ability to communicate with others on respective ways
- Ability to negotiate and express negative emotions constructively
- Ability to overcome stereotypes



COMPARING EDUCATION IN 21ST CENTURY

- Part of education policy is to measure global performance
- Education policy is not separate from other policies, such as economics
- Nation's educational competitiveness is often measured with International comparisons, e.g. OECD's PISA
- Assessments can be done on national level, but also curriculum or school level



REFERENCES AND FURTHER READINGS

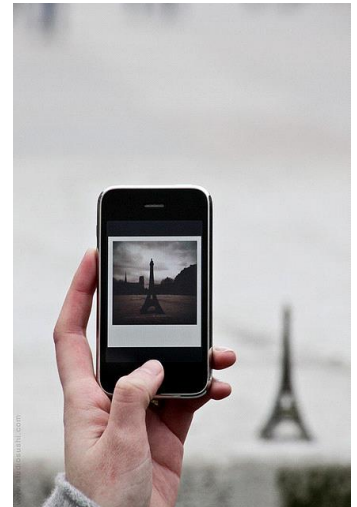
- Defining Twenty-First Century Skills by Marilyn Binkley, Ola Erstad, Joan Herman, Senta Raizen, Martin Ripley, May Miller-Ricci, Mike Rumble (2012)
- Globalizing education Policy, by Fazal Rizvi and Bob Lingard (2010)
- Larsson, Thomas. (2001). *The Race to the Top: The Real Story of Globalization* Washington, D.C.: Cato Institute. p. 9. [ISBN 978-1930865150](#)



YOUR CASE

Start working using the 21st Century skills as a lense:

- Which of the skillsets are possibly **emphasized** in your context?
- Which **should be** emphasized more?
- *Explain*



Aim is to *understand* how the contextual, technological, cultural and societal factors *define both needs and possibilities*

IN SMALL GROUPS

Discuss your findings, you have 30 minutes

- Did you find any similarities?
- What about the differences?
- What do you think *might explain* these?

Prepare to present these for the whole class



NEXT TIME

- **10th of March**, everyone will present their work 😊
- If you have any questions, you can send us e-mail or visit us
- My office hours are Wednesdays from 10-12

