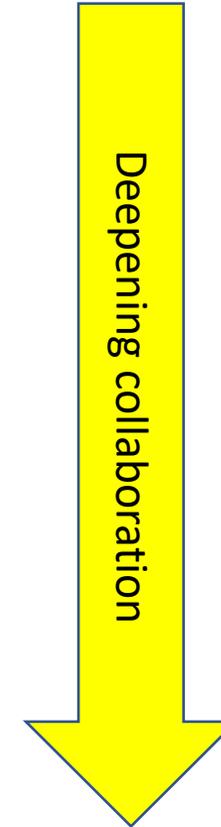


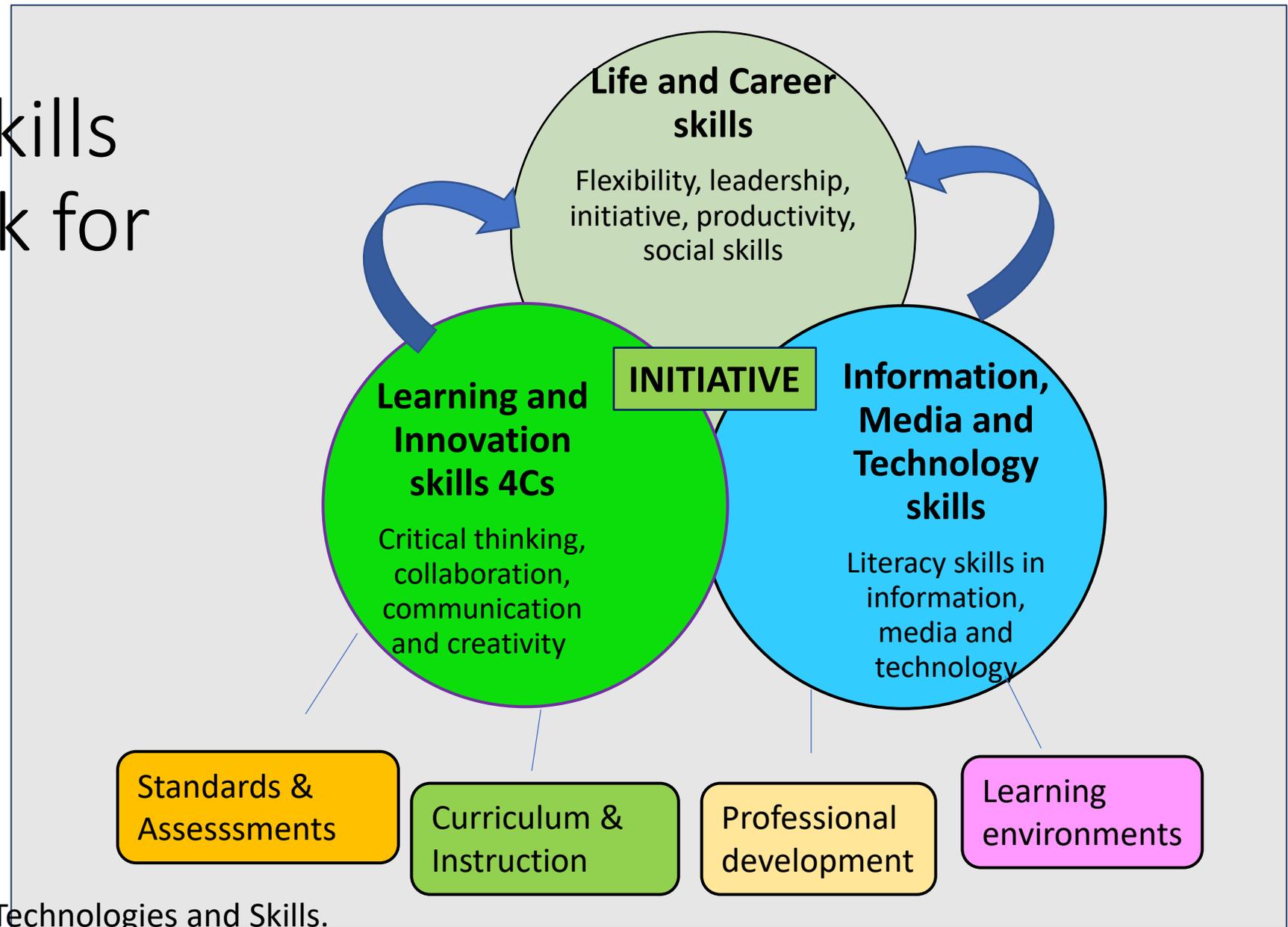


# Agenda in this session (8.45-12.30)

- Introduction to collaborative teaching
- Hands-on-task 1
  - Grouping and getting to know each other in your small group
  - Experiences about collaboration and Co-teaching plan
- 10.00 – 10.30 Break
- Wrap-up from Hands-on-task 1
- Introduction to integrative teaching
- Hands-on-task 2
  - Drafting your integrative teaching
- Wrap-up Hands-on-task 2



# 21st century skills and framework for 21st century learning



(OECD 2016. The Power of Digital Technologies and Skills.  
OECD 2018. The Future of education and skills. Education 2030.)

Collaborative teaching (Co-teaching)

# Why to collaborate? - Collaboration between teachers

- **Collaboration** is one of the 21st century skills and has been identified as one of learning and innovation 4Cs, as well as future work life core competences (Deloitte, 2017; OECD, 2016, 2017; BECF 2017)
- **Teacher collaboration** has a positive impact on aspects of both teacher well-being and self-confidence (OECD, 2020)
- It is important to **equip your student teachers with collaboration skills they need in guiding their future pupils**
  - Teaching together gives an example of co-teaching for your student teachers
  - Giving the student teachers collaborative tasks and letting them to teach together
  - **Collaboration is a skill that can be learnt by collaborating**
- In this workshop **you gain experience of teacher collaboration**, and can utilize this in planning **collaborative learning**



# How can teachers collaborate?

## Forms of collaboration

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- *Lighter forms: Exchange and co-ordination for teaching*
  - Engage in **discussions** about the learning development of specific students
  - **Exchange** teaching materials with colleagues
  - **Attend** team conferences
  - **Work** with other teachers in the school to ensure common standards in evaluations for assessing student progress
- *Deeper forms: Professional collaboration*
  - **Teach jointly** as a team in the same class
  - **Participate in** collaborative professional learning
  - Engage in **joint activities** across different classes and age groups
  - **Observe** other teachers' classes and provide feedback

(Vangrieken et al., 2015; OECD 2020. A Teachers' Guide to TALIS 2018)

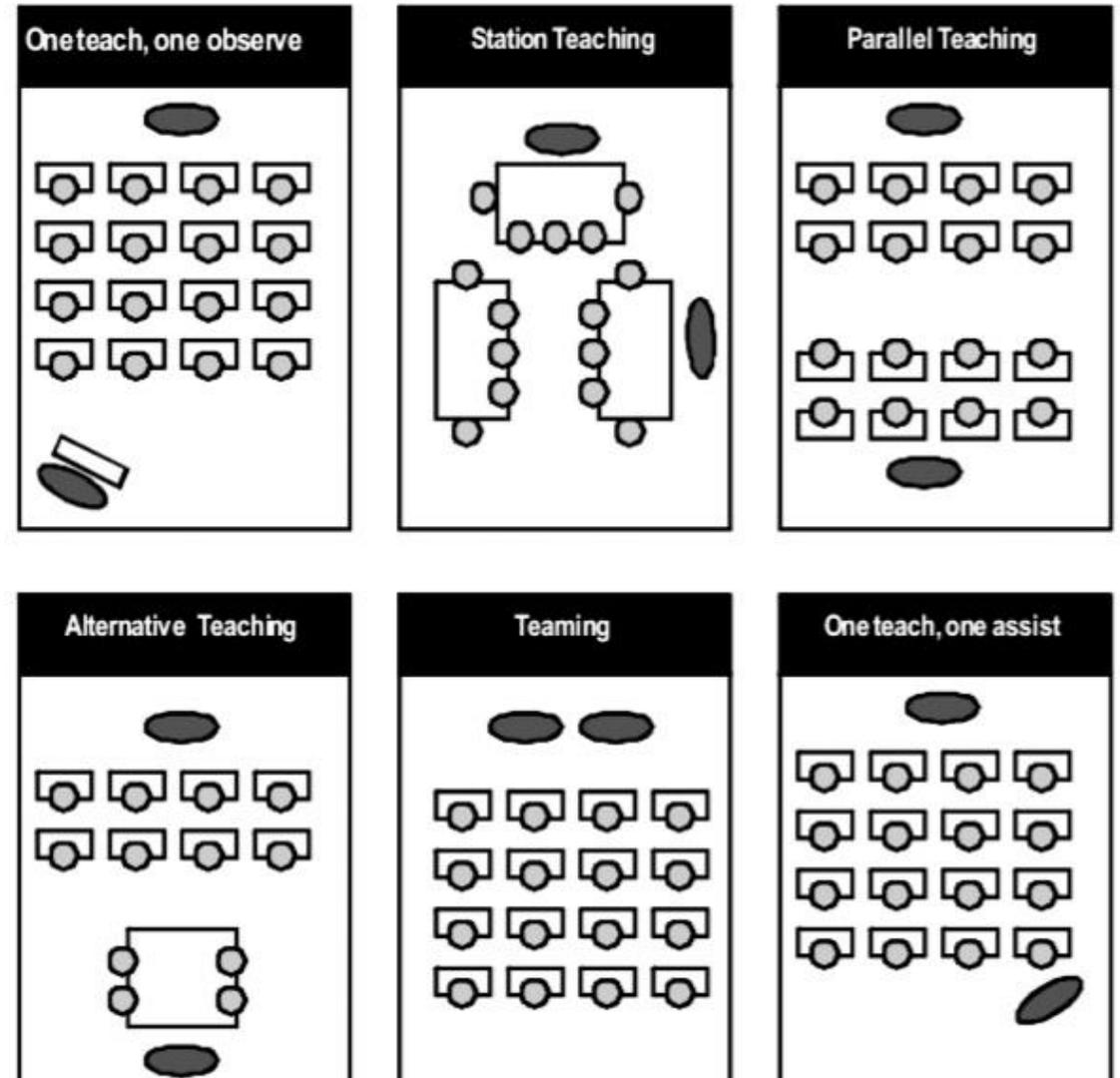
# Co-teaching - innovative forms of 21st century teaching

- The aim of co-teaching is to turn the learning environment (e.g. school or university) into an inspiring **learning community**, where teachers can also learn.
  - Digital Market Place (Faculty of Educational Sciences, HU)
  - The network model of teaching and learning (Faculty of Sciences, HU)
- Time for professional development and experiment, sharing experiences from teaching related projects



# Co-teaching approaches

- One teach, one observe: one teacher leads large-group instruction, the other **gathers academic, behavioral, or social data on specific students or the class group**
- Station teaching: instruction is divided into three nonsequential parts and students, rotate from station to station, being **taught by the teachers at two stations and working independently at the third**;
- Parallel teaching: two teachers present the same material for the primary purpose of **fostering instructional differentiation and increasing student participation**
- Alternative teaching: one teacher works with most students, the other **works with a small group for remediation, enrichment, assessment, preteaching etc.**
- Teaming: **both teachers lead large-group instruction by both lecturing, representing opposing views in a debate**, illustrating two ways to solve a problem
- One teach, one assist: one teacher leads instruction, the other **circulates among the students offering individual assistance**.



# Collaborative teaching: Hands-on-task 1

- Working in groups (Zoom breakout rooms and Padlet)
- In your small groups please **introduce** yourselves first and then **discuss about collaboration and co-teaching**:
  - Introduce yourself shortly (name and discipline)
  - How have you collaborated (co-teaching) with your colleague teachers so far? (Collaboration experiences)
  - How could you / how are you going to co-teach during the distance period? (Co-teaching plan)
- Output
  - Collaboration experiences, Co-teaching plan
  - Please post your main points to Padlet under your group number <https://padlet.com/veerakallunki/txe10cmlD0fufR29>
- Wrap-up: Reflective discussion about outputs

# Hands-on-task 1

- Collaboration experiences
- Co-teaching plan

Integrative teaching

# What is integrated teaching?

*“linking of facts and fact-based theory across disciplines to create a common groundwork of explanation,”* (William Whewell in 1840s, Wilson 1999)

- An integrated/interdisciplinary approach refers to **learning themes across disciplines**
- Goal is to **help student to construct a complete picture** about the learnt things and understand of connections between subjects
- **Finding creative links** requires reflection, openness, initiative, creativity and associative observing skills
- The **combination of integrated disciplines** can be anything: the more unusual the combination is, the more interesting the teaching and learning becomes

# Why to integrate teaching?

*“...science often takes place in silo, providing a sliced picture of reality. Sometimes it is difficult to combine different perspectives: what one learns about human beings in biology class does not always connect to what we learn in psychology, history or statistics.” (Lonka, 2018)*

- Teaching is normally **subject-based**
  - Pro: Core contents are learnt well, which is a basic condition for multidisciplinary/integration
  - Con: Individual's content knowledge is fragmented
- **Integrative teaching supports student-centered learning**: for the student, the world is complete and not split into different disciplines
- **Integrative teaching** among teachers is a **deep level collaboration** (e.g. didactics of teaching and joint activities across different age groups)
- Taxonomy of significant learning → Integration
- Kenya's BESF (2017) includes **several integrated subjects or topics**

(BESF, 2017; Kallunki, Karppinen & Komulainen, 2017; Lonka, 2018)

# Different forms of integrative teaching

- **Theme-based** integration (the same theme is taught *during lessons of different subjects, maybe several teachers*, aiming to form bigger picture about the theme, teacher or students and teacher choose together, can be also a theme day at school)
- **Phenomenon-based** integration (real world comprehensive phenomena, one teacher, student chooses, student-centered)
- **Discipline-based** integration (basics of the topic first, then integrating other subjects by focusing on one topic, several teachers, teacher chooses)



## Example of integrative teaching: Pedagogical energy game

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- *Form of integration:* discipline based
- *Disciplines integrated:* physics, crafts, drama (three teacher educators planned and co-taught the course)
- *Integrated topic:* energy concept (basics of energy as a concept in physics and chemistry was taught first, then the aspects of other disciplines were added)
- *Context:* physics advanced optional course for pre-service teachers
- *Completing the course:* learning the basics of energy concept, designing and implementing a pedagogical energy game that integrated physics, crafts and drama
- *Implementation:* Pre-service teachers organized a gaming session for 4th graders (10-year-olds)

## Examples of integrative task points in the energy game

**Physics and crafts:** The pupils made a **table hot pad** (crafts) through which **heat energy** (physics, insulation) could be explained. The pupils designed the table hot pads themselves, which is a typical part of learning crafts.

**Drama and physics/chemistry:** The **states of water** (physics/chemistry) were taught through drama. Every state, solid/liquid/gas, was modelled by varying the velocity of the particles. The pupils **pretended to be molecules** (drama) and moved according to each state on a specific platform designed for this purpose; e.g., when pretending that they were gas, their movement was very quick.



# Integrative teaching: Hands-on-task 2

- Continue working in the same groups as earlier
  - Please discuss about your disciplines and choose a common topic/theme that could be taught in an integrative way (at least three integrated disciplines)
  - You can choose whether to focus on *higher education* **or** *school level integration*
  - How can the teaching and learning of a chosen topic be designed so that students could grasp a holistic picture?
- **Output:** An imaginary draft of integrating teaching among at least three subjects (e.g. some language, math/arts, sciences)
  - Topic/theme, integrated disciplines, target group/course, intended learning outcomes (skills, knowledge, attitudes), form of integration, teaching and learning activities (think what the student does)
  - Please post your main points to Padlet under your group number <https://padlet.com/veerakallunki/txe10cmld0fufr29>
- **Wrap-up:** Reflective discussion about the outputs and success/challenges of your collaboration

# Hands-on-task 2

- Topic/theme
- Integrated disciplines
- Form of integration
- Target group/course
- Intended learning outcomes
- Teaching and learning activities → What is the student doing?

The background features several colorful speech bubbles in shades of blue, green, red, and orange. A large, prominent orange speech bubble is in the foreground, hanging from a black cord. The text is overlaid on the left side of the image.

## Take home message

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What thing about collaborative or integrative teaching inspires you most? Please share it with others in the chat window with three words.

# References

- Kallunki, V., Karppinen, S. & Komulainen, K. 2017. Becoming animated of teaching Physics, Crafts and Drama together - a multidisciplinary course for class teacher students. *Journal of Education for Teaching*, (43)1, 32–47.
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