

Expanding on tools for digital learning

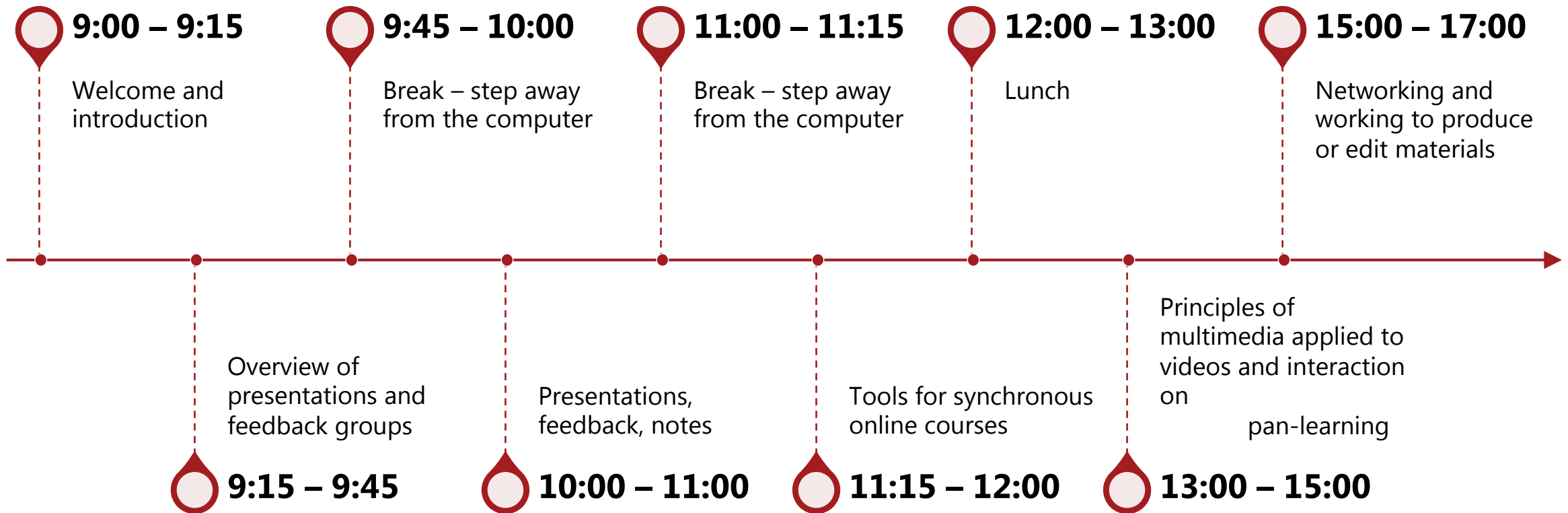
PANOSC Training of Teachers
Workshop Day 1*

Jesper Bruun

KØBENHAVNS UNIVERSITET



Today's agenda



Sign-up for presentation, feedback, and discussion

- <https://ucph.padlet.org/jbruun/feedbackDay1>
- Follow instructions. Write your name on post, so we have the option to make groups
- Feedback procedure
 - Use Feedback groups (or we make changes according to who is here)
 - Assign a note-taker
 - Present, give feedback
 - Notetaker writes down and sends to presenter afterwards
- As a group use your discussions to find questions you want answers to.
- After break: Go to rooms in Gather (Feedback Group 1 to room 1 and so forth) and start. Assign enough time for everyone

Feedback questions (use as needed)

Is it clear who will be teaching in the activity/course? Will teachers be able to adopt the materials?

Is it clear who will be learning in the activity/course? How is the material relevant to them? Do they know that it is relevant or should they be "convinced"?

Is it clear, what should be learned? How are learning goals presented to learners?

How will the proposed activities help learners achieve the learning goals? Should they be changed? Should the learning goals be changed? If so, how?

Consider the time, place, and context for the activities. How can variations in time, place, and context change the answers to the above questions?

Feedback procedure (repeated)

- Use Feedback groups (or we make changes according to who is here)
- Assign a note-taker
- Present, give feedback
- Notetaker writes down and sends to presenter afterwards

BREAK

STEP AWAY FROM THE COMPUTER!

Do feedback!

BREAK

STEP AWAY FROM THE COMPUTER!

Tools for synchronous online teaching

- Face-to-face teaching: As teachers, we can move easily in the room and gauge how learners are doing.
 - Are some people ahead? Are some behind? Should we give a joint message?
- This is a challenge in online synchronous teaching.
- The trick is to have learners work in ways and with tools which provide teachers with information to make decisions and provide guidance.
- Now, we present some tools and how one might implement them in Gather
- Then we will have you reflect on how you would might find use of the tools

LUNCH

STEP AWAY FROM THE COMPUTER!

Analysis of videos for learning about neutron scattering

- Go to **Train the Trainers intro-ns playground**.
- Go to **Introduction to diffraction from crystalline materials**
- Short link: <http://bit.ly/kimsVid>.
 - Read the learning goals, watch the first video and look at the quiz in the end.
 - Chrome and Safari seems to work better than Firefox – also Flash not needed
- What is the prior knowledge and expertise needed to engage with the material in a meaningful way?
- Are what you see (e.g. read) and hear connected in a meaningful way, both on blackboard, elsewhere in the video, and in associated material? How? Or how not? Is some information repeated and therefore redundant?
- Should learners read before, after or during?

Multimedia principles (based on Ayres 2015)

- Multimedia principle: Deeper learning occurs from words and pictures compared with pictures alone. Two modalities are better than one.
- Place explanatory text near diagram (e.g.) or more generally, source 1 near source 2, if both sources pertain to the same element to be learned
- Lengthy text > lengthy spoken words. Text can be revisited. But how about revisiting spoken words?
- Redundancy is unwanted – e.g. a graph and a full description of that graph.
- Prior knowledge and “learning expertise” influence how much self-direction learners themselves can provide.

Begin designing a video and associated material

- What would be the topic?
- What should students do/learn with the video?
- What associated materials should be there?
- Do you need a script?
- Do you need to make a slideshow? A pencast? Stand in front of a blackboard?
- Can you use your phone/computer as a recorder?

Idea exchange

- What have you come up with?

Keep working and networking