



Design thinking around teaching and technology

Objectives for today:

- Thinking about your teaching, who your students are and how you teach
- Exploring co-creation
- Considering opportunities for collaboration
- Introducing the Nextbook technology

Let's look at:

Our context

Our tool, Nextbook

Co-creation or collaborative learning

Design thinking

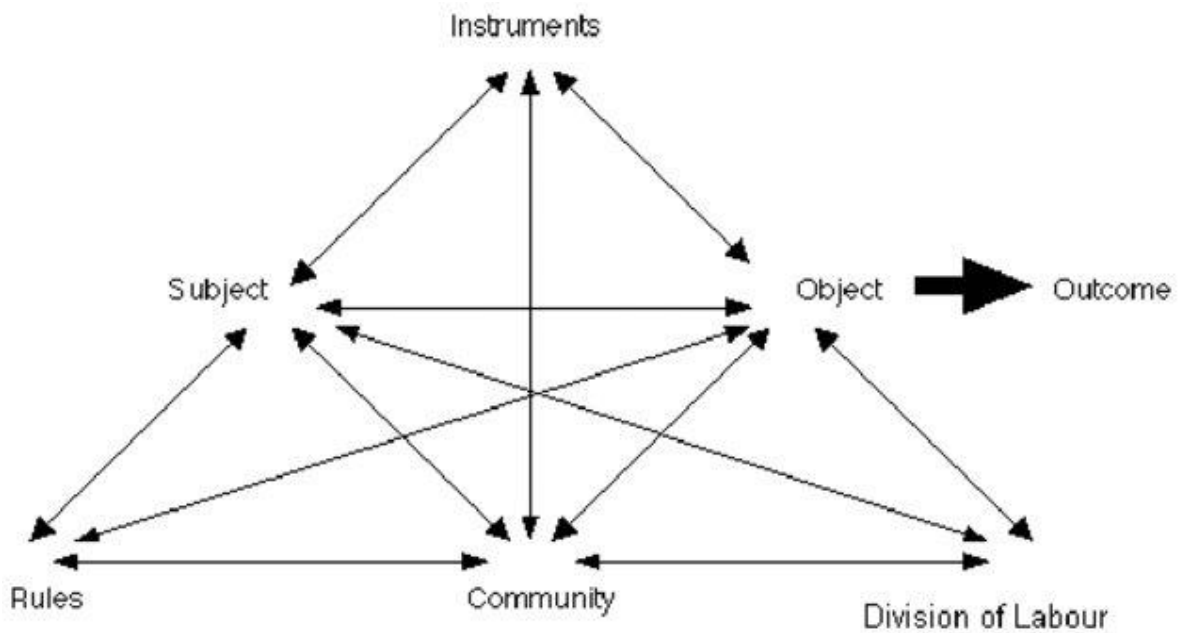
Context:

To start, map out the context in which you work on sheets of paper **(30 mins)**

This might include:

- the different people involved,
- the types of tools you use
- some aspects of the core curriculum content
- the boundaries around our teaching
- the environments where teaching and learning might take place
- the pedagogical approaches we use (including any beliefs or perceptions we have about what makes a good educational experience, and
- the assessment methods we use.

If you need a prompt for this, you may use Activity Theory



**Model of a human activity system (Engerström, 1987)*

Our tool, Nextbook: (15 mins)

Once you have mapped out the separate elements of your context we need to see where Nextbook could fit or be introduced and how. We might consider the object of using Nextbook as being to promote collaboration/co-creation.

Let's use design thinking:

Subtractive Change (15 minute discussion + 15-20 minutes to feedback to whole group)

This is a design approach to problem-solving tasks that asks us to consider how taking something away, rather than adding something, can lead to improvements and solutions.

Our challenge is we are introducing something (Nextbook) and aiming to realise another thing (collaborative learning).

Looking at your maps, what can we hypothetically take out in order to promote collaboration? This might be barriers to inclusion, a type of resource, some governing rules...

What could the impact be? Would it make things less stable? How would it improve the learning context?

Speculative Design



We use speculative design to i) consider (speculate) on the possible effects to interventions and ii) speculate, imaginatively, the possibilities for use of the tool if no boundaries existed.

Brainstorming speculation:

When Nextbook is introduced to the context.... *What might happen? What else might you need? What is missing and what is added? how can Nextbook potentially be used? How can you push students to the front? If no barriers existed, how would we promote collaboration and co-creation? (Make notes on flipchart in small group 20 minutes + 20 minutes to share back to whole group)*

Tinne's presentation: Nextbook in use (15 mins)

Reviewing the design thinking:

The Learning Activity Analysis Tool (LAAT) pictured below is adapted from the 8-step model (Mwanza, 2001), which itself comes from Activity Theory. Mwanza's model uses prompts to help us to think wider about our students, the tools and the object or purpose of the tool.

Review your own context(s), your thinking about Nextbook and collaborative learning done so far with anything from the LAAT framework below that needs consideration or has been overlooked.

From the table below, which questions are most important to yourself in terms of your teaching and your students? (20 mins)



Activity component	Support issues
Activity of interest	Is the nature of the activity clearly stated? Is it clear how this is related to other activities? How and when should the tutor check whether the learners have interpreted this correctly?
Objective	Do the objectives need clarifying and how might this be achieved?
Subjects	Who are the learners? What are their backgrounds? How ready are they? Do they currently have the skills/knowledge needed to carry out the activity?
Tools (mental or physical)	Do the learners need support in selecting and using the tools that might be useful to use?
Rules & regulations	What are the cultural norms involved? Is the activity compulsory or optional? Is the nature of the task something the learners would expect to carry out as part of their studies? How can difficulties due to any conflict in expectations be overcome?
Division of labour	Is there a need to support the learners in understanding and carrying out their expected roles?
Community	What is the nature of the learning environment? What are the learners' expectations in relation to community? How can their roles be supported?
Outcome	How will learners know if they have achieved the outcome? How can feedback be provided to support the achievement of the outcome? Is the assessment of the outcome aligned with the nature of the task?

Design-based theory

Please write on the flipchart paper some responses to the following:

1. What can we do to improve Nextbook according to your own teaching, curriculum and students?
2. Through everything we have explored, how are we meeting our objectives of co-creation?
3. Is there anything else that has been overlooked or that you would like to add?
4. How has today influenced your own consideration of teaching?