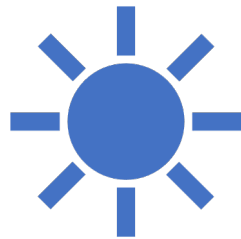


PCET Day 4

Collaborative Technology



So far

- Looked at theory around tech and education (SAMR, TPACK)
- Looked at some developing legislation in the field
- Considered the importance of PCK with technology
- Looked at principles of assessment

Today

Looking at theories relating to collaboration and technology

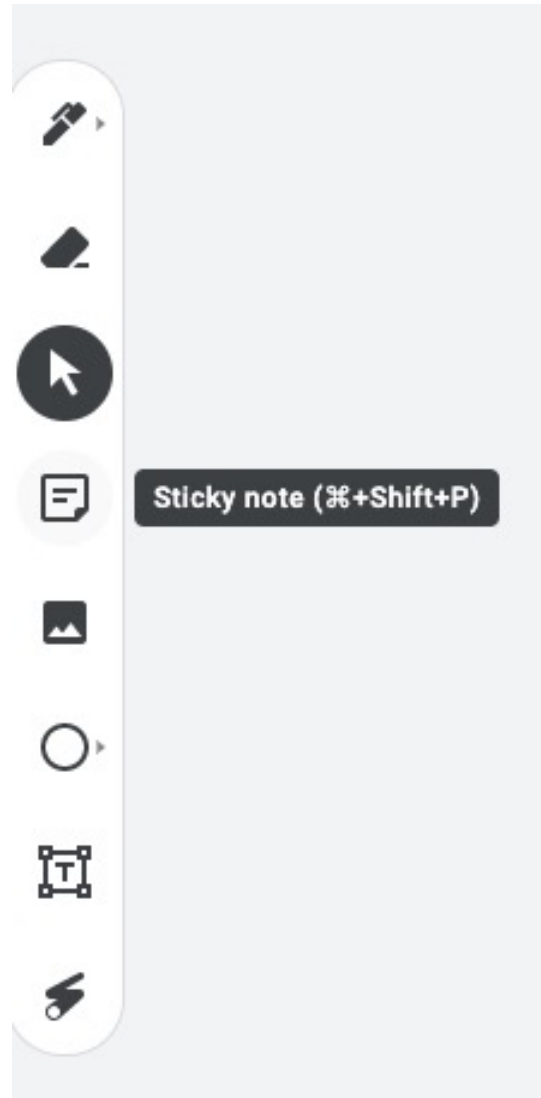
Looking at

- Back to the 21st century skills
- Lev Vygotsky
- Bruner
- Constructionism
- Activity around a range of collaborative technologies

Defining

- What do we mean when we say collaboration?
- How do students collaborate in classrooms without technology?
- How does this collaboration benefit learning?

What
technologies
come to mind
when you think
of
collaboration?



Use the sticky note to add to this
Jamboard

<https://jamboard.google.com/d/1r4vRVsDRbVB1mgv-EedDb5ahsNIcmbWn6wCWIEeC4WI/edit?usp=sharing>

Around
collaboration

Are some forms of collaboration
more superficial than others?



What does educational theory tell us about collaboration?

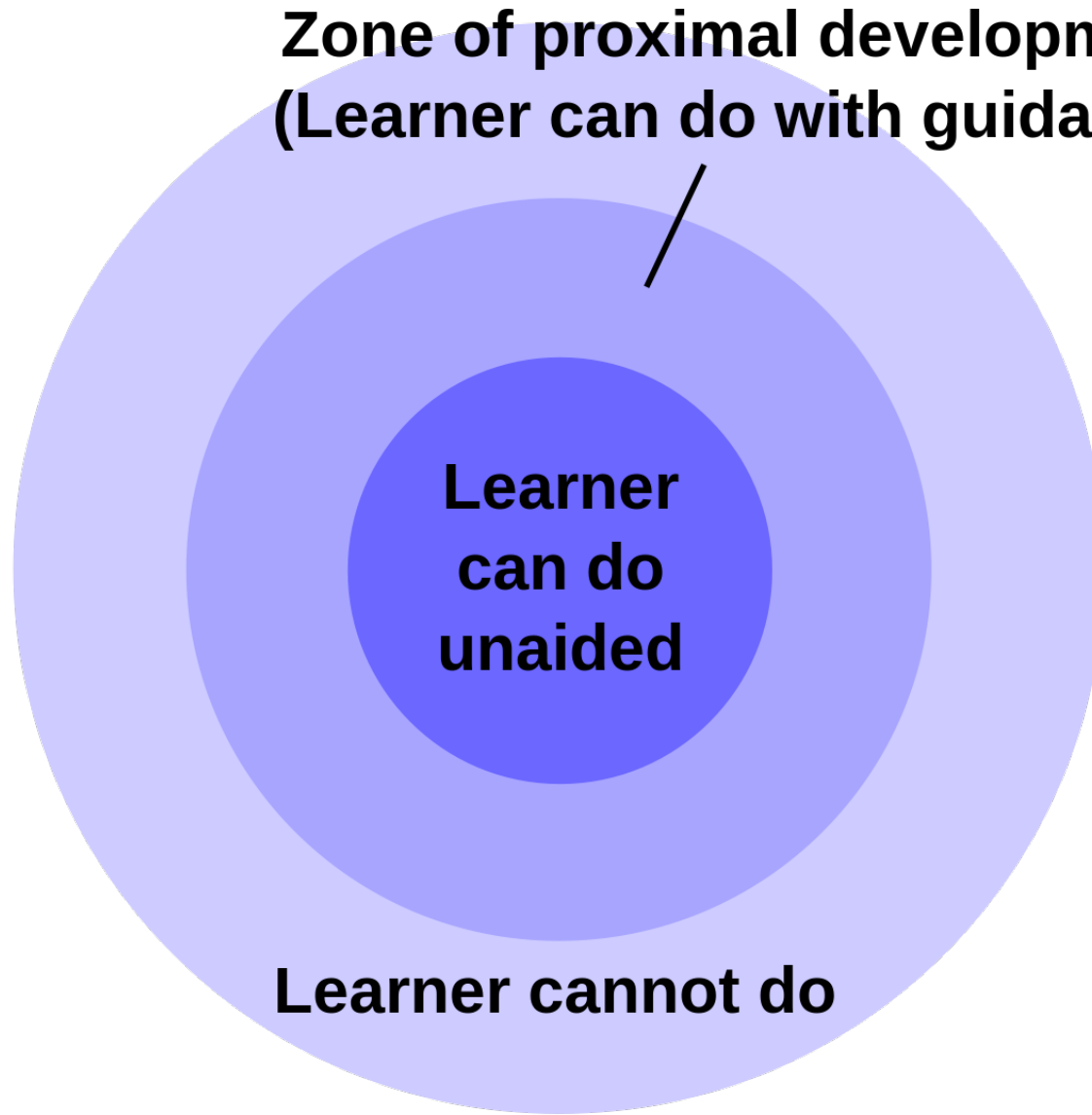
- "Learning is more than the acquisition of the ability to think; it is the acquisition of many specialised abilities for thinking about a variety of things."—Lev Vygotsky, *Mind in Society*, 1978
- Leading education theorist – most well known principles are the Zone of proximal development and the concept of the more Knowledgeable other



**Zone of proximal development
(Learner can do with guidance)**

**Learner
can do
unaided**

Learner cannot do



The ZPD and MKO

- The "zone" is the gap between what a child knows and what they do not yet know.
- Acquiring the missing information requires skills that a child does not yet possess or cannot do independently, but which they *can* do with the help of a more knowledgeable other.
- Who is the more knowledgeable other in a classroom?
- The MKO is able to provide clear **scaffolding** for the development of knowledge

Scaffolding

- Core of many theories, but a core developer of the principles of scaffolding is Bruner
- So what do we mean by scaffolding?
- In breakout rooms come up with a shared definition of what you think scaffolding means and add to this Padlet
- <https://padlet.com/beardandwonderful/30s8ae97zzrhzxi2>

Scaffolding

Scaffolding is a form of adult assistance that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts. It is a process whereby the adult controls those elements of the task that are initially beyond the learner's capacity, thus allowing the learner to complete those that are within existing capabilities. (Lantolf & Thorne, 2006: 107).

What scaffolding do you provide for your learners?

And how do they move from other regulation to self regulation? Can you give specific examples to your subject?

So, what about tech?

- What opportunities does technology offer in terms of:
 - ZPD
 - MKO
 - Scaffolding for learners



Constructionism

- learning theory and theory of instruction
- states that building knowledge occurs best through building things that are tangible and sharable (Ackerman et al., 2009: 56).
- “Constructionism (in the context of learning) is the idea that people learn effectively through making things.
- Does this reflect in your practice? Can you give examples?

The Tech

How can tech lend itself to the concept of constructionism?

What the 21st century skills say about Collaboration

- Working Together
 - Students **work together** when the activity requires them to work in **pairs or groups** to:
 - discuss an issue
 - solve a problem
 - create a product
- Shared Responsibility
 - Students have **shared responsibility** when they work in pairs or groups to develop a common product, design, or response.
- Substantive Decisions
 - Students make **substantive decisions together** when they must resolve important issues that will guide their work together.

What the 21st century skills say about Collaboration

- Interdependent Work
 - Students' work is **interdependent** when all students must participate in order for the team to succeed.
- How could students' evidence these with the use of technology?

Activity

1. You will be put into breakout rooms – here you need to pick one item each from the *Collaborative tools list* on moodle
2. Each room has a shared PowerPoint presentation – add your name, and the tool you have chosen to one of those slides
3. Go away and play around with/research that tool
4. Fill in your information about the tool on the slide
5. Return to the the team and demo it to your classmates
6. Return here, where some will be asked to demo



Return and feedback