How to foster dialogical, digital and deeper learning?

Teacher educator Sanna Ruhalahti, HAMK School of Professional Teacher Education, Finland
S-O-F-T-E-N Your Approach
How do we facilitate learning to achieve in deep learning outcomes?

How can we create better opportunities the use of diverse digital environments?

How can we engage students and learning communities in deep learning experiences?

How can we spread and engage students in deeper learning experiences?
The goal of this task is that every person in the learning community will participate freely and spontaneously. The crucial principle in dialogue is that one is allowed to be imperfect and one's thinking under development.

Instructions
- introduce yourself to the others by telling them your first name
- tell others about the associations that your name evokes for you
- complete this task first in small groups of three persons
- after that, everyone will introduce themselves to the whole group (for example, 15 persons) by telling them their name and naming one association they mentioned earlier.

Spontaneous participation (trust)

- Helps in creating a dialogical container and an atmosphere that advances dialogue
- Frees participants to participate actively

“Too often, we assume that learning is a social process, but how often do we pause to reflect on how we support the formation of (dialogical) collaborative knowledge construction, especially in digital environments, and which leans towards deep learning?”

(Ruhalahti, 2018)
Sociocultural theory

- The genesis of sociocultural theory is usually attributed to Vygotsky, and the theory posits that learning is a process of the internalisation of cultural settings such as tools, ways of speaking, acting, thinking, and the product of a collaborative construction (Vygotsky, 1978).
- These cultural settings are seen as digital environments which are used as part of dialogical knowledge construction, in the way students speak, act, think together and construct shared artefacts.
- Learning is seen as a social process and the origination of human intelligence in society or culture (Bereiter, 2002, p. 437; Säljö, 2009; Vygotsky, 1978).
- Social interaction plays a fundamental role in the development of cognition.
- According to Vygotsky (1978), learning is seen on two levels: social (through interaction with others, inter-psychological, actual) and individual (internal, intra-psychological, potential).
Key elements to foster D, D & D

- Authenticity; learning questions
- ZPDs: ADL & PDL
- Dialogical competence
- Artifacts - collaborative knowledge construction
- Blended
- Diverse digital environments-dialogical space/container
- Community of practice
- Self-paced learning; orientation & internalising
- Scaffolding
Dialogue tickets (symmetrical participation)

The goal of this task is that the learners learn to regulate their participation in dialogues and collaborative knowledge creation situations so that every participant speaks as well as listens to the others.

The objective is that every participant is given a turn to speak or will speak and that every participant is given a turn to listen or will listen. The rhythm of taking turns to listen and to speak becomes internalised.

- the theme of the dialogue is chosen on the basis of learning goals
- the participants receive dialogue tickets, which work like entrance tickets into the dialogue
- every time you share your thinking with others, you use one dialogue ticket; the tickets must be used at regular intervals
- talk in a focused manner, pausing now and then, and **speak about two sentences at a time**
- when your turn to speak ends, put one ticket on the table into the pile of contributions
- each member of the group uses all their dialogue tickets before a new round (with new tickets) is started
- each person takes same amount of tickets and uses them at regular intervals during the second round
- the groups continue these rounds at their own pace
- take turns to speak and listen in a random order, that is, do not proceed clockwise or counter-clockwise

- the participants weave a synthesis (an overall view) of what they have learned during the dialogue rounds
- the entire dialogue lasts for about 10 minutes.

DDD (Dialogical, Digital and Deep Learning) pedagogical model

Learning objectives
- Self-paced orientation and internalising
- Preparing for dialogical participation
- Enabling authenticity in learning

Deep learning outcomes
- Integrating theory and practice
- Scaffolding
- Increasing deep learning through dialogical collaborative knowledge construction

Digital environments
- ADL
- PDL

<table>
<thead>
<tr>
<th>Design principles (DPs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DP1:</strong> Supporting the development of dialogical competence in the learning community.</td>
</tr>
<tr>
<td><strong>DP2:</strong> Opening the learning objectives collaboratively on the basis of an authentic learning and deep-learning evaluation framework.</td>
</tr>
<tr>
<td><strong>DP3:</strong> Emphasising knowledge acquisition and self-paced learning at students’ actual development levels (ADLs).</td>
</tr>
<tr>
<td><strong>DP4:</strong> Scaffolding dialogical collaborative knowledge construction.</td>
</tr>
<tr>
<td><strong>DP5:</strong> Providing meaningful, personalised digital environments.</td>
</tr>
<tr>
<td><strong>DP6:</strong> Intertwining the deep-learning evaluation framework with the dialogical evaluation process.</td>
</tr>
</tbody>
</table>
the participants pair up

- each pair is given a dialogue theme that is important from the perspective of the learning goal
- the participants talk about the theme, taking short turns and staying on each other's speech
- each participant tries to recognise the key utterances, or **hot words or phrases**, in their partner's speech
- the way we understand or interpret what the other person says and our knowledge of the theme they are talking about influences our recognition of key utterances or hot words
- each participant tells their partner which key utterances or hot words they found in their speech
- a **key utterance** is crucial for understanding another person's thinking and for the development of that thinking
- the pairs talk about the key utterances; why certain expressions were interpreted as key utterances

**Catching the hot words**

Helps you to grasp the important and crucial points in others thinking or writing.

Helps to find novel approaches to dialogue and knowledge construction.

One useful question for this reflection is "What did you become aware of during this task?"
Another, more demanding question is "What did you learn from this task?"

A redesigned evaluation framework for learning outcomes through authentic and dialogical collaborative knowledge construction (Ruhalahti, Aarnio, & Ruokamo, 2018).

Deep learning evaluation

Deep Learning
- constructing, creating, designing and developing a new artefact or perspective
- applying knowledge that has been constructed and trying to identify various procedures
- analysing and evaluating various types of knowledge and varieties of practical procedures as well as their significance
- comparing various solution options
- applying knowledge and skills by combining theory and practice

Superficial Learning
- searching for content and meaning of information
- constructing unstructured knowledge copying existing information and concepts without any source criticism
- searching for and retrieving information from source materials as separate facts and lists

Digital Environments

Learning Communities
Weave as a synthesis pearl

- the participants create an overall view of a certain sufficiently concrete matter that they are aiming to learn
- the participants interlace “threads” that relate to what they have learned, weaving these threads into a tightly woven synthesis
- after the weaving that is done together with the group, each participant writes down a few words or draws a picture to describe what he/she considers to be a real pearl (i.e. an important idea, understanding etc.) produced by the weaving
- in a synthesis pearl, the words have meaning that is related to the subject that is to be learned and that is based on the personal point of view of the participant
- taking turns, each participant describes some important matters related to the content of their synthesis pearl while the other members in their group listen
- the task can be further elaborated if the other members in the group use open questions to ask each participant to explain more about the content of their pearl

The goal is that the participants form a synthesis (an overall view of their understanding as it is at the moment) of some matter that they are aiming to learn. In addition, the objective is that every participant weaves a personal synthesis in their own unique way.


Let’s connect:
www.linkedin.com/in/sannaruhalahti