Training the trainers:

Scaffolding complex problem-solving

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Peer discussion

• Work in pairs or threes and discuss the following:

Have you ever had a situation where you could pinpoint the complexity of the problem someone was dealing with and you knew the (possible) solution to that problem? How did you get the person go where they needed to be? What did you do?
Scaffolding – what is that?

• Have you ever experienced a situation when you see where someone is and where they need to be? The ‘gap’ may be too big for the person to bridge. How to help this person to get to the point where they can manage on their own?

• The concept goes back to Vygotsky (1978), term coined by Woods et al (1976)
  – Providing assistance to learners when needed and fading as the learner gains competence.
How to support learning?

• There are research-based techniques to support individual as well as group learning
  – In teaching
  – In mentoring
  – In supervision
• Evaluate, what the competence level of the learner is.
• Pinpoint, where they need to get, what the goals are.
• Assess – will the learner get there independently, or will they require assistance?
• Provide that assistance and gradually fade that assistance as the competence grows.
Direct scaffolding framework

- Scaffolding mechanisms, Reiser (2004)
- Scaffolding process, Quintana (2004)
- Look at the handout – read it in pairs/threes
  - Do you recognise any of the techniques?
  - Have you used any of them?
Share with the entire group

• Which techniques were more prevalent in your group?
• Were there techniques you were not familiar with at all?
• Would you consider using them?
What does the framework mean?

• How to ‘read’ the table:
  – Sense-making; progress management; articulation and reflection
  – Structuring/problematising
  – Techniques
  – Meaning; examples.

• Any questions? Any comments?
Work with the case - read and think

- How would you support solving that situation?
- Which techniques would you use to support – sense-making, progress management, articulation & reflection? Give examples.

Especially now that there are a lot of projects and tight deadlines and so on, in order to alleviate the pain of creating something new, they [supervisors] give ready reading lists, for instance. And that is a big service, but it can also be quite a big disservice. It’s this old issue that if you give bread to the hungry, you can ease his hunger today, but teach him to farm and he won’t be hungry for the rest of his life …
Another case

- What the doctoral students want from the supervisor is some kind of fair treatment. And it is a bit tricky because you might yourself think that you are treating them all in an equal way, but that doesn’t automatically mean that you give them all the same jobs and the same amount of work. From my perspective, I see that to some students I can give certain tasks and that much more work, and so on. In my opinion, it should be related to their skills and capacity, and that is fairness, but they don’t see it that way. They want everything to be exactly the same. . . That’s a problem because you should treat them in a fair way, but true equality where everything is shared just the same is impossible.
Group discussion

• Share some of your ideas with the entire group.

• Now, go back to the situation you described at the beginning of the session – your own situation. Do you see alternative possibilities for solving the situation now? Would you consider using any of the scaffolding techniques? Which ones?
To conclude

• Would you like to share any ideas about your own cases?
• How did the workshop help with your own learning?
• Would you consider using some of the techniques in the future?
• Do you have any other good scaffolding techniques that could be added to the framework? Please share.
Thank you!

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