

Cognitive Apprenticeship

From Phase 3: Information on topic and content

The methods of phase three are designed to support participants in acquiring information and technical background knowledge. The focus is on factual knowledge (e.g. statistics on inequality of opportunity in education in Germany, Austria or Sweden).

a) General information

Time frame: Several lessons

Social form(s): Individual work, face-to-face-counselling

Number of people: Learning group

Short summary: Cognitive Apprenticeship (“cognitive teaching”) is a method that is intended to make cognitive processes visible to the learner. It is based on the idea of the learner as an “apprentice” and the lecturer as a “master” and is structured in four phases:

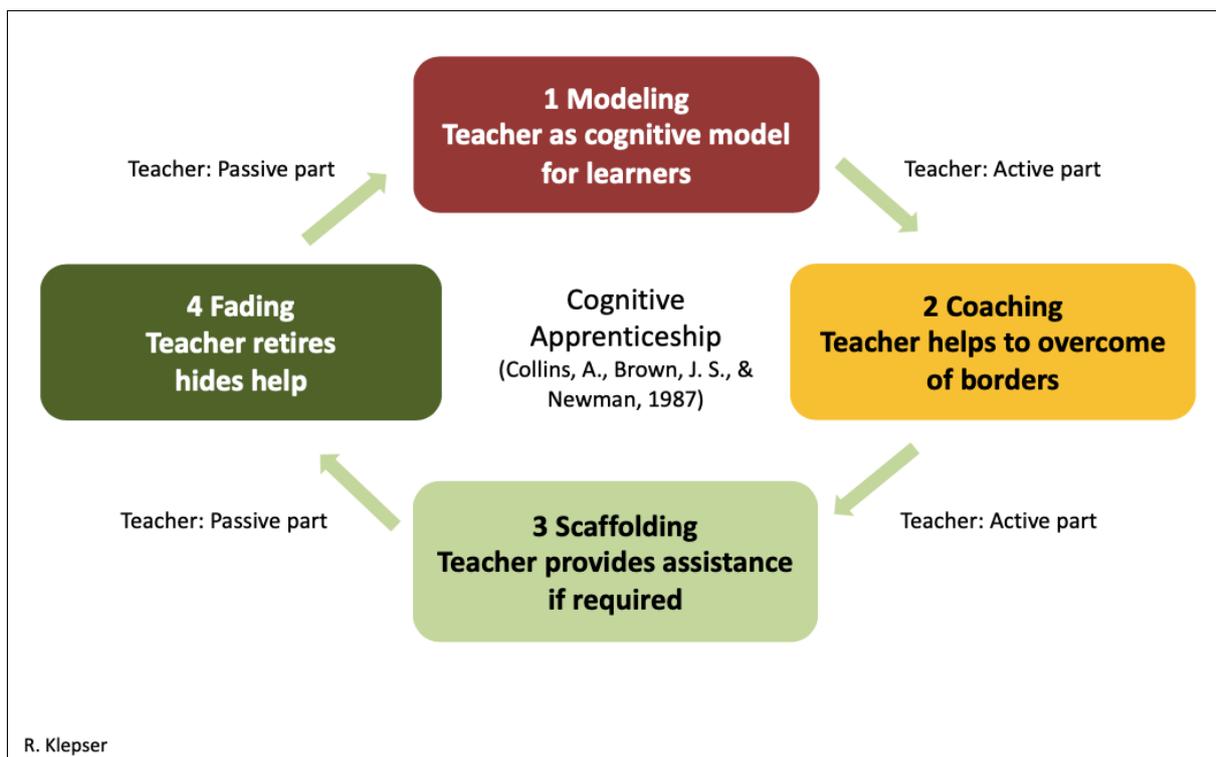


Illustration 7: Visualisation of the four phases of the Cognitive Apprenticeship.

The method is based on the idea to use the advantages of a practical teaching in the sense of a master-apprentice-relationship for the theoretical training. The practical training should make the process visible up to the completion of a construct/product, which mostly remain invisible in a theoretical training.

b) Description of the method

The lecturer has to prepare the session on basis of knowledge level of the group by choosing a sequence that the lecturer, as the active teacher wants to present. In a further preparation concerning the scaffolding the lecturer has to think about different learning levels within the group and prepare support models for each learning level in advance. The working steps are:

1. **Modelling:** The lecturer is demonstrating the tasks the participants have to do. While demonstrating, the learner can experience and build a conceptual model of the task at hand. The modelling also includes demonstrating expert’s performance or processes in practice.
2. **Scaffolding:** During this phase the lecturer is applying strategies and methods to support the learner’s learning. In this phase the teacher has to match the difficulty of the task to each participants’ level. The lecturer may have to execute parts of the task that the participants are not yet able to do. This requires the lecturer to have the skill to analyse and assess the participants’ abilities in the moment.
3. **Fading:** The lecturer tries to fade away as the participants’ competencies are rising.
4. **Coaching:** This phase involves observing participants’ performance and offering feedback and hints to sculpt the participants’ performance to that of an expert. The lecturer oversees the participants’ tasks and may structure the task accordingly to assist the participants’ development.

The method is based on the assumption that abstract topics can also be taught practically. The internal processes involved in solving an abstract problem are to be made visible, for example by writing down one’s thoughts or speaking them on tape. The topic chosen by the lecturer can be related to the heterogeneous situation in classes in schools, e. g. didactical knowledge on how to individualise a lesson in school with regard to the individual learning level of the students.

c) Reflecting questions on how to implement the methods in programmes for (recently) immigrated and refugee teachers

How can the participants and lecturers contribute their knowledge in a way that does not culturalise?

Each learner learns at his*her own pace and gets support from the lecturer if needed.

What must be considered so that this method does not lead to stereotypes and/or discriminatory categorisations?

The lecturer should be aware of different communication paths of participants.

How to work with this method in a language sensitive way/how to include multilingualism?

To work with this teaching method in a language sensitive way, in the first phase (modelling) the demonstration of the task has to be at a language level of the language of instruction each group member is able to understand. In the following phases the teacher has to adapt the language level to each learner.

Multilingualism can be included, if the lecturer and/or one of the lecturers is able to speak different languages or if participants can translate and/or interpret.

How to use this method in a participatory way?

The initial idea of a “master-apprentice”-relationship is not participatory. The topic and the way knowledge are acquired is initially teacher-centred. In the process, however, the teacher fades into the

background and especially in the last two phases the method can be participative, if the participants are able to increasingly take over the decision on relevant content and the way of learning.

Possible variations of the method

The method should not be changed in structure.

Possible application (for other contexts, e.g. schools)

The method is easily adaptable into the school context.

Tips

Before deciding about this method, the lecturer should analyse the learning and language level of the language of instruction the participants to be able to provide an appropriate scaffold.

Examples/Possible topics

The method can also be used to introduce teaching methods in the form of teaching simulations. A participant who has already gained a lot of experience with a certain teaching method will initially demonstrate it to the others. Afterwards other participants take over the role of the lecturer, while the experienced participant gives guidance according to the cognitive apprenticeship method.

d) Further information

Collins, A./ Brown, J.S./ Newman, S.E. (1988): *Cognitive Apprenticeship. Teaching the Craft of Reading, Writing and Mathematics*. In: *Thinking: The Journal of Philosophy for Children*; Volume 8, Issue 1, 1988, 2-10. Available at: https://www.pdcnet.org/thinking/content/thinking_1988_0008_0001_0002_0010 [29.02.20].



This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. <https://creativecommons.org/licenses/by-nc-nd/4.0/>