# The Jigsaw-Puzzle-Method:

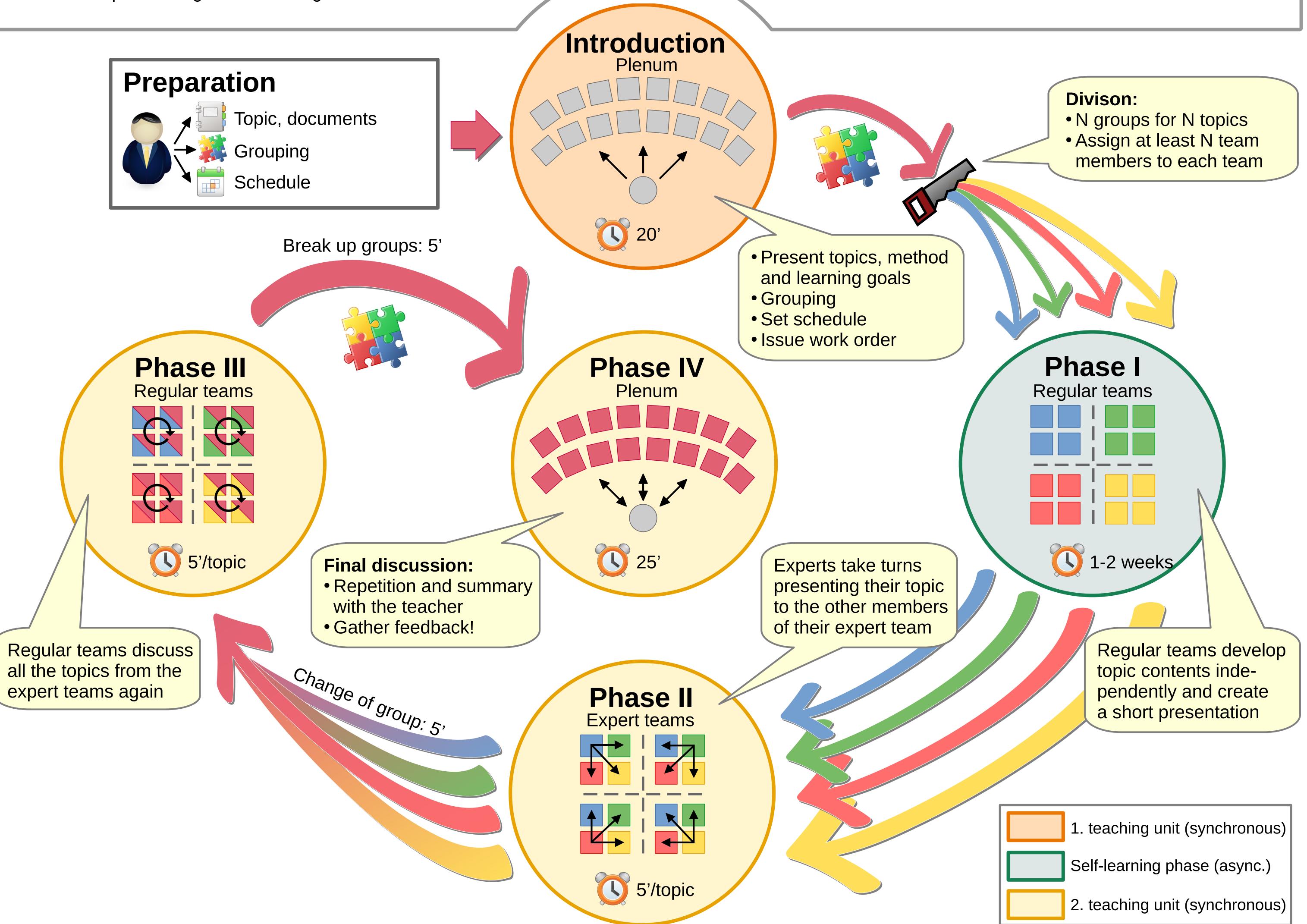
An opportunity to promote activating and student-centered teaching Jakob Harden, IMBT/TVFA, Graz University of Technology

#### Introduction:

- Teaching in universities is still characterized by frontal teaching and individual assessment. Group work is often associated with the following problems: "free riders", lack of possibility for individual assessment, and high expenditure of time for little content.
- In professional life, work usually is done as a team. In addition to specialist skills, there is a requirement for key competencies. However, group work allows to promote those competencies in a targeted manner.
- The jigsaw-puzzle method promotes key competencies and the activation of the students. It focuses on the activities of the students (student-centred). With sensible use (e.g. to repeat and deepen content) and the combination with other teaching methods, frequently addressed problems get in the background.

### Materials & Methods:

- Several materials are already available for preparing the jigsaw puzzle method [1][2].
- Application of the jigsaw puzzle method with a modification in the initial phase.
- Modification: The extension of phase I, in which the students work on the content independently and in a self-organized manner, also makes it possible to work on more complex and time-consuming topics. The modification also makes this application a blended learning scenario.
- The teaching methods used consist of group work (phases I-III), monologic classroom talk (introduction) and dialogic classroom talk (phase IV).



#### Conclusion:

- Didactic preparation and accompaniment of the students through the teaching and learning scenario contribute significantly to success.
- Furthermore, the group puzzle method is well received by the students. The assessment shows that students master the topics conducted by the jigsaw puzzle method particularly well.
- The learning scenario focuses on the activities of the students, where the teacher provides support only. Independent work promotes the activation of the students.
- Feedback from students enables the teacher to improve the application of the learning scenario (SoTL).
- The method can be applied sensibly in courses (lectures and exercises) with up to 30 students.

## Literature:

- [1] Kroker, Bettina. "Unterrichtsmethoden: Das Gruppenpuzzle." Betzold Blog. April 04, 2020. https://www.betzold.at/blog/gruppenpuzzle/
- [2] Frankenberger, Rolf. 2008. "Das zersägte Klassenzimmer." Universität Tübingen

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## Further information:

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