

## I Objectives

### Occasion

Lesson planning is an important task for teachers in civic education that involves complex decisions about the selection of didactic strategies and goals. Didactical decision-making requires *professional knowledge* (Shulman, 1986, 1987) and *didactical reasoning skills* (Schuba, 2022). However, there is a lack of empirical findings on teacher student's acquisition of *professional knowledge* and *didactical reasoning skills* in civic education.

### Aim

Develop and research a teaching format to enhance the *professional knowledge* and *didactical reasoning skills* of teacher students in civic education by instructing them to reason about answers to instructional design questions through collaborative argument processes structured by *Argument Maps*.

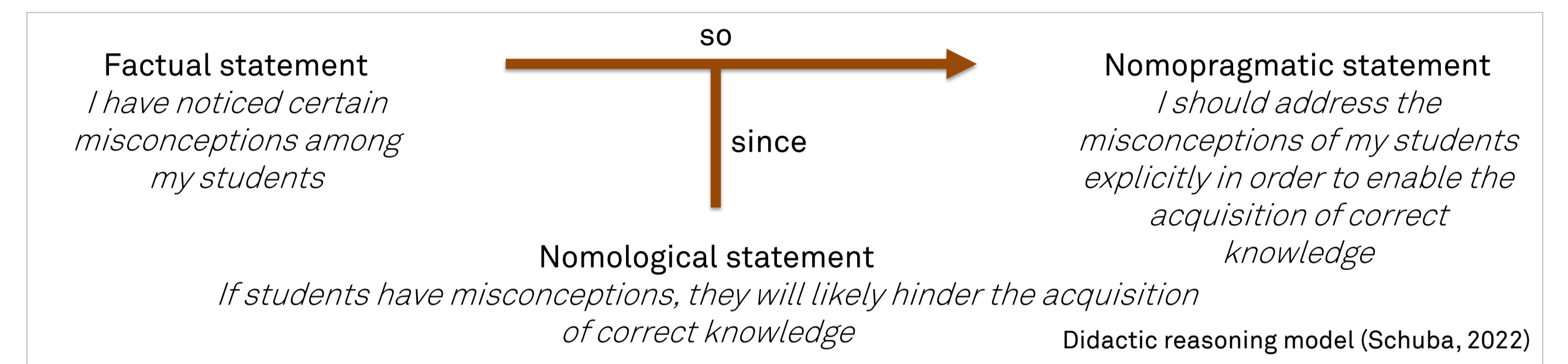
### Key Research Questions

What is the impact of using *Argument Maps* in didactical argumentation processes on ...

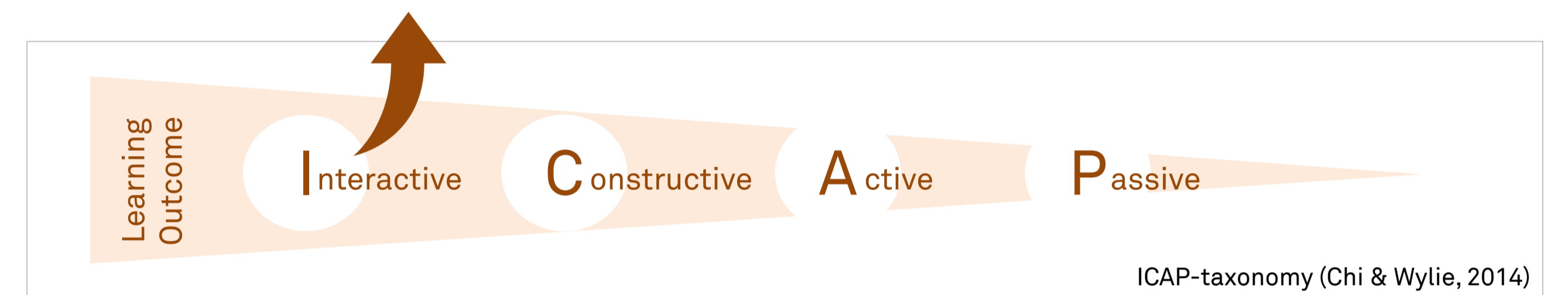
1. ... professional knowledge (CK, PCK)?
2. ... didactical reasoning skills?
3. ... quality of discourse?

## II Theoretical Framework

- *Professional knowledge* is a core dimension of civic education teacher's professional competence (Weißenö et al., 2015)
- *Didactical reasoning* for evidence-based lesson planning (Schuba, 2022)



- Deeper understanding is most likely to be achieved in an interactive engagement mode when learners are encouraged to engage in quality *discourse* (Chi & Wylie, 2014)



- Following the "Arguing to learn"-Approach (Andriessen & Baker, 2014), argumentation processes foster deeper learning, but scaffolding, e.g. through (argument) mapping, is necessary (Rapanta & Walton, 2016)

# Teacher Student's Didactical Reasoning on Questions of Instructional Design in Civic Education

An experimental study of the use of argument maps in structuring didactical argumentation processes

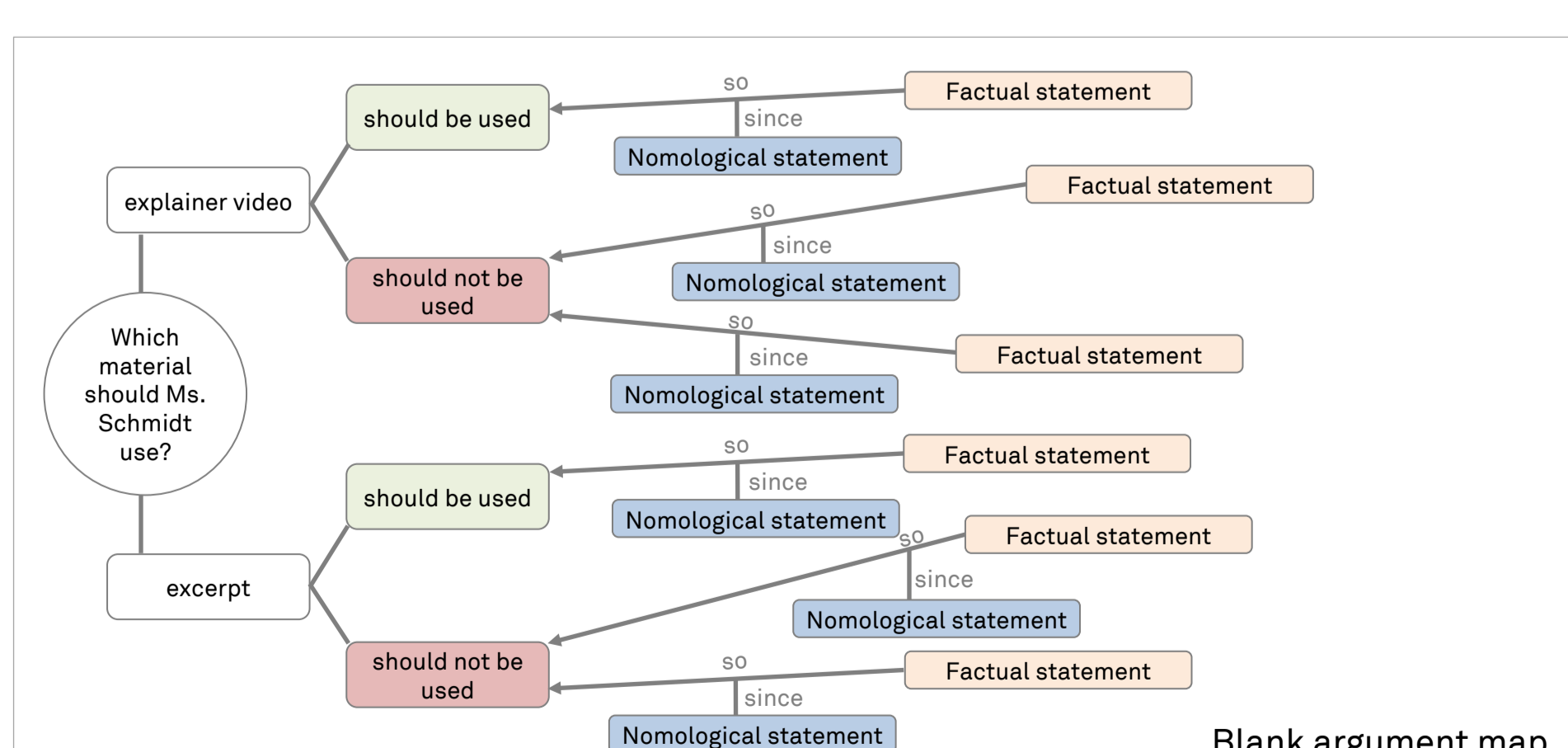
## III Intervention

### Vignette

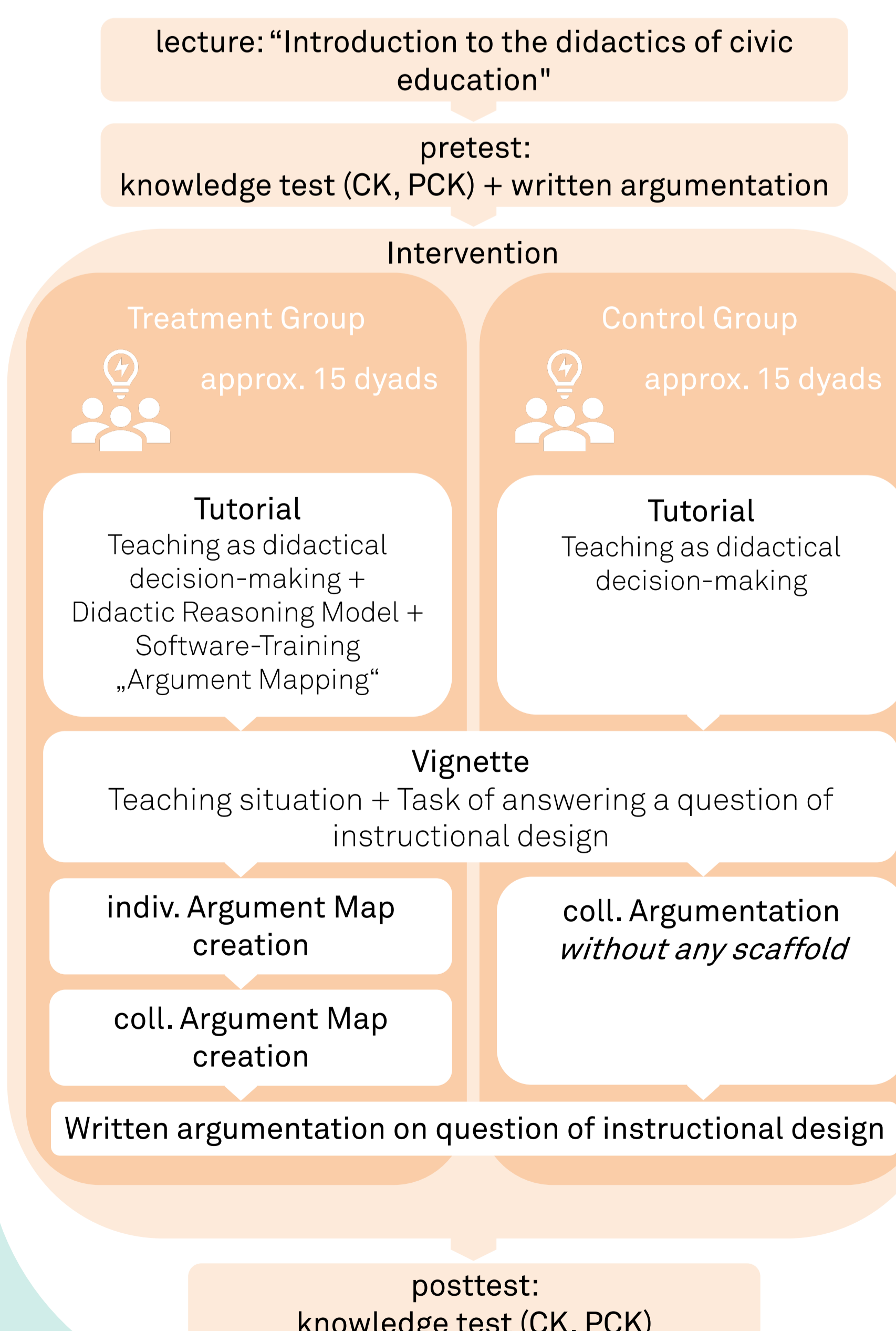
- *Situation:* A fictional teacher plans a lesson in civic education about Germany's parliamentary system of government. In the previous lesson she has identified several misconceptions of her students. Now she is looking for appropriate teaching materials that will help her students gain a correct understanding. The options are an explainer video and an excerpt from a textbook.
- *Question:* Which option is better suited to foster students' understanding of the German governmental system?

### Scaffold

- Creating a didactical argumentation on the question of instructional design (explainer video vs. excerpt) by constructing *Argument Maps* with visualization software (Lucidchart)



## IV Research Design



### Sample

- n= approx. 60 teacher students in civic education
- randomized controlled trial

### Independent Variable

- *Argument Mapping*

### Dependent Variables

- *professional knowledge*
- *didactical reasoning skills*
- *quality of discourse*

### Data Collection

- knowledge test
- written argumentation
- videographed work processes



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