



K4D is funded by the Federal Ministry of Education and Research as part of the joint "Qualitätsoffensive Lehrerbildung" of the federal and state governments. SPONSORED BY THE

Federal Ministry of Education and Research

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*.

II Theoretical Framework

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



• Deeper understanding is most likely to be achieved in an

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?

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

IV Research Design

lecture: "Introduction to the didactics of civic education"

pretest: knowledge test (CK, PCK) + written argumentation



Sample

- n= approx. 60 teacher students in civic

Independent Variable

Dependent Variables

- professional knowledge



Jannis Nicolas Gluth

jannis.gluth@tu-dortmund.de

Department of Social Sciences Institute for Interdisciplinary Didactics

Andriessen, J. & Baker, M. (2014). Arguing to learn. In K. R. Sawyer (Ed.), The Cambridge Handbook of the Learning Science (p. 439–460). Cambridge University Press. Chi, M. T. H. & Wylie, R. (2014). The ICAP Framework. Linking Cognitive Engagement to Active Learning Outcomes. Educational Psychologist, 49(4), 219-243. Rapanta, C. & Walton, D. (2016). The Use of Argument Maps as an Assessment Tool in Higher Education. International Journal of Educational Research, 79, 211-221. Schuba, C. (2022). The Complex Nature of Teaching. Fostering Didactic Reasoning Skills of Preservice Teachers through the Writing of Learning Journals [unpublished doctoral dissertation]. University of Freiburg. Shulman, L. S. (1986). Those who understand: knowledge growth in teaching. Educational Researcher, 15(2), 4–14. Shulman, L. S. (1987). Knowledge and Teaching: Foundations of the New Reform. Harvard Educational Review, 57(1), 1– 22. Weißeno, G., Weschenfelder, E. & Oberle, M. (2015). Überzeugungen, Fachinteresse und professionelles Wissen von Studierenden des Lehramts Politik. In G. Weißeno & C. Schelle (Eds.), Empirische Forschung in gesellschaftswissenschaftlichen Fachdidaktiken. Ergebnisse und Perspektiven (p. 139–154). Springer VS.