Active Learning Observation Networks
Visualizations, analyses and relations to didactic theory
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1. From observation protocols to network maps

Two cameras/classroom set up by teacher

Video recording  Coding scheme  Network transformation

Scheme adapted from COPUS [1]. See handout for example in English

Scheme adapted from [2]. Circles (nodes) represent merged codes per interval.

Network representation
Community detection [3] partitions network (different node colors)

Network map
Circles represent a community
Names based on codes and checked with original data [4]

2. Network maps reveal differences in implemented lesson structure

Same lesson
Different context

Student-driven inquiry
Teacher 1

Student-driven classroom dialogue
Teacher 2

3. Models for active learning in the sciences (based on Lombardi et al 2021 [5])

Teachers in Denmark do not recognise simplified transmissive models [5], but not all subscribe to inquiry-style active learning. “Directed Learning” may be an alternative.

Selected Literature

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