# Session D1 - English papers

# Analysis of formative feedback: Form and effect

# Program text

We will use data from 174 feedback and response couplets to discuss different ways of giving formative feed-back and the different types of effects this can lead to.

#### **Abstract**

#### Introduction

The course Fundamentals of the Didactics of Science and Mathematics (DidG) is offered to all Science students at UCPH and usually attracts ~ 100 students. The last five years we worked systematically with formative feedback (cf. Black 2015) to teach students about feedback and to assist their learning. When written feedback was provided students were asked to respond with written reflections. In this paper, we investigate these sets of "feedback-response" to see if certain ways of providing feedback can be linked to certain ways that students respond to this feedback. We thus ask: how is formative feedback formulated when it is used formatively?

# Method

Using thematic analysis (Braun & Clarke 2006) to code feedback and responses, 174 couplets were identified in a data set from 2015. Couplets were converted into a weighted, directed network which shows how different types of feedback are followed by different types of responses. Together with descriptions of the thematic codes, the network was analyzed visually using software Gephi (Bastian, Heymann & Jacomy 2009) to reveal and investigate emerging patterns of feedback and response.

#### Results

We identified and described 10 feedback codes and 14 response codes. Via the network analysis we identified patterns in which types of feedback tended to lead to which types of student reactions

#### Discussion

We will use this data to discuss different ways of giving formative feed-back and the different types of effects that this can lead to. We plan to use the results to further develop our practice of formative feed-back on the course DidG.

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## Literature

Bastian, M., Heymann, S., & Jacomy, M. (2009). Gephi: an open source software for exploring and manipulating networks. ICWSM, 8, 361-362.

Black, P. 2015. Formative assessment – an optimistic but incomplete vision. Assessment in Education: Principles, Policy & Practice 22: 161-177.

Braun, V., Clarke, V. 2006. Using thematic analysis in psychology. Qualitative Research in Phycology 3: 77-101

