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Exploratory and Critical Dialogues as Learning and Reflection Tools.

Abstract.

This intervention study investigates and qualifies students` use of exploratory and critical dialogues when reading digital and multimodal texts in lower secondary school. I investigate how students engage in group dialogues developing skills for critical communication and validating texts on websites through interthinking (Littleton & Mercer, 2013).

The study has its main theoretical foundation in a sociocultural understanding (Vygotsky, 1986, Bakhtin, 1986, Littleton & Mercer, 2013, Maine, 2015, Wegerif, 2013; 2016, Mercer, Wegerif & Major, 2020). Learning and understanding does not happen individually but is developed through dialogues in social contexts.
The assumption in this paper presentation is that students can acquire critical communication skills by using the language to look exploratory on their own group dialogues. That students lack a meta-language about the potential for learning and reflection through exploratory and critical dialogue.

One of my questions is: How can we qualify the student´s dialogue by facilitating an exploratory and critical validation of it by students?

The study is an intervention study explored through a developed teaching material. I`m exploring the students use of information seeking, exploratory and critical dialogues and if or how they have extended their dialogues, and do they show more awareness of the potentials in the exploratory and critical dialogue?

So far, I can see some significance in the student´s dialogues. In some of the dialogues I can see that when students use hypotheses, comparisons and involve general knowledge, it extends their meta reflections and their use of dialogic spaces in different ways. I have, in the student´s dialogues, found different types of critical dialogues: exploratory, critically debatable, critically associative and creative dialogues.

Key words: critical and exploratory dialogue, interthinking, dialogic space, chains of utterances .

Exploratory and Critical Dialogues as Learning and Reflection Tools.
Extended summary.

Introduction.

This dissertation investigates exploratory and critical peer group dialogues and whether and how these dialogues can lead to joint reflection. The overall aim of the PhD project has been to show

how students working in peer groups in lower secondary school, are talking and thinking together on the basis of a completed didactic design on the one hand, and, on the other hand, I wish to contribute theoretically and didactically to the teaching in exploratory and critical dialogue as a reflective resource. This knowledge is also significant to the development of dialogic education to support all students in their collaborative dialogues and interthinking.

Theoretical foundation.

The study is based on a sociocultural and dialogic foundation, including the concept of "inner speech" from Lev Vygotsky's theory of learning and Mikhail Bakhtin's theory of dialogue with particular focus on his concept of 'utterance'. By applying a sociocultural understanding of learning as the theoretical foundation of classroom research, I am focusing on the exploratory and critical perspective of dialogue and the students' reflections during the dialogues, inspired by the exploratory dialogue research of Douglas Barnes & Frankie Todd (1995), Neil Mercer (1995), and Kathryn Pierce & Carol Gilles (2008) among others, while the perspective on the reflective dialogue is based primarily on Karen Littleton' &, Neil Mercer's (2013) concept of ´interthinking´ and Rupert Wegerif's (2013) concept of ´dialogisc space and Rupert Wegerifs and Fiona Maine's (2015) 'critical and creative thinking', respectively. Furthermore, I include the (critical) discourse and literacy research of James Paul Gee (1992) and Allan Luke (2014) as well as the critical communicative competencies of Jeppe Bundsgaard (2013) in my work with defining critical talk. The types of critical talk and the student' reflective collaboration are central subject-related areas that were gradually clarified throughout the study through my empirical analyses and theoretical work.
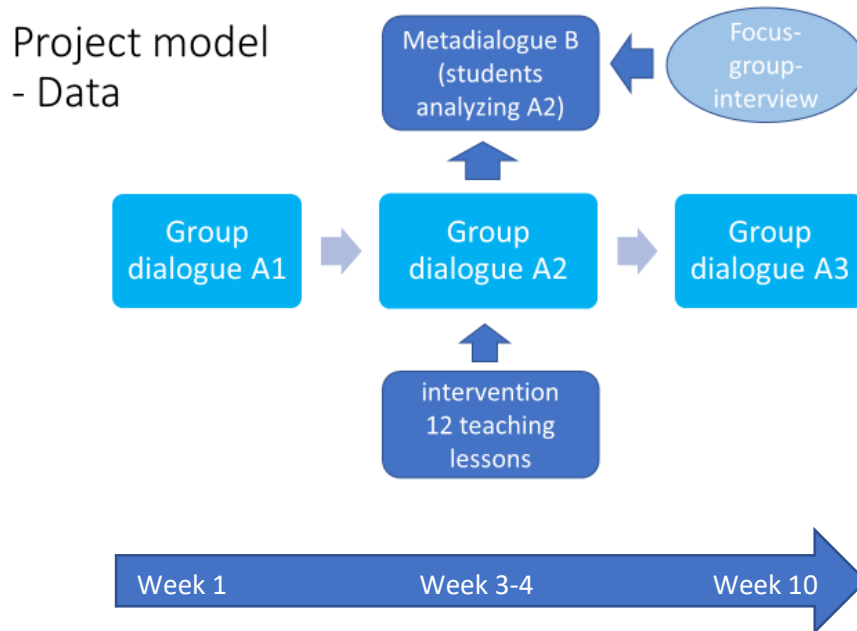
Research Questions:

How do students working in groups use dialogue to explore the content and credibility of websites?

How can we qualify the same dialogue by facilitating an exploratory and critical validation of it by students?

Methods & Data Sources.

This PhD project is an intervention study with four lower secondary classes participating. To describe the field before and after the intervention, I have completed an initial dialogue test of students` group work based on their dialogue while reading websites and a dialogue test after the intervention. Data are conducted through video and audio records of students group dialogues and focus group interviews. My hypothesis is that when students reflect and have a meta-dialogue over their own dialogue, they can strengthen their ability to criticize and make source criticism of websites

Project model
- Data

Metadialogue B
(students
analyzing A2)

Focus-
group-
interview

Group
dialogue A1

Group
dialogue A2

Group
dialogue A3

intervention
12 teaching
lessons

Week 1   Week 3-4   Week 10

The intervention study consists of a teaching material, where the students is taught and work with three concepts: information seeking, exploratory and critical dialogues. The last part of the intervention consists of an assignment where the students analyse their own audio recorded dialogue to see if and how they use the three concepts. There are three different but similar assignments. The intention is to register if there has been a progression from dialogue A1 to dialogue A3.

The horizontal question to be examined is to see whether there is a development in the students` use of exploratory and critical dialogical expressions and whether there is a change in their use of reflexive utterances, how they are critical to each other's speeches. The vertical question to be examined is to see how the students analyse and reflect on their own audio recorded dialogue

Analysis

I analyse abductively. I use a phenomenological frame for an inductive reading and formative and design experience as a frame for a more deductive analysis.

First part of the analysed transcriptions and the interviews of the focus groups indicates that when the teacher set up dialogic group assignments the student isn`t aware of how to be exploratory and critical. Students try to analyse the elements on the website by reading the multimodal information and then assessing the credibility of the content without exploring how the website's multimodal texts interact and what it can do for credibility.

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Significance

When critical dialogues become a topic for teaching, and this turns out to be able to lead to joint reflection, there is reason to question and discuss how this knowledge can affect the learning and reflection of the students. Central to the study are the four different types of critical talk that I found in my data: exploratory, debating, associative, and creative talks**,** which to a different degree and in different ways open up for a dialogic and collaborative space of reflection.

Simultaneously, the study shows that when students get the opportunity to turn their own group dialogue into writing, collaborative monitoring in the dialogue becomes possible. In relation to this, the present study contributes with a concrete didactic measure**,** which can be applied to increase the students' attention to as well as understanding and awareness of how they talk together during group work, and how they can use this knowledge going forward to qualify their talks and reflection.

Based on the findings of the study, I discuss and question whether the four types of talk and the students' space of reflection actually are the ones that we, implicitly, expect the students to master.

Key words: exploratory and critical dialogue, interthinking, dialogic space

References.

- Bahrab, Sasha & Squire, Kurt (2004). *Design-Based Research: Putting a Stake in the Ground*, The Journal of Learning Sciences, 13(1), 1-14.
- Bakhtin, M. (1981) *The Dialogic Imagination*, Austin: University of Texas Press.
- Blikstad-Balas, Marte (2019). *Literacy i skolen,* Universitetsforlaget.
- Brown, A. L. (1992). Design Experiments: *Theoretical and methodological challenges in creating complex interventions in classroom settings*, Journal of Learning Science, 2(22), 141-178.
- Bundsgaard, Jeppe m.fl. (2013). *Kommunikationskritisk kompetence,* Gyldendal.
- Carlsen, Dorthe og Hansen, Jens Jørgen (2015). *Digital læsedidaktik,* Didaktik serien, Akademisk Forlag.
- Collins, A. (1992). *Towards a design science of education.* In E. Scanlon & T. O`Shea (Eds.), New Directions in Educational Technology (pp. 15-22). Berlin: Springer.
- Hetmar, Vibeke (2017). *Positioneringsteori og scenariebaserede undervisningsforløb.* In Hanghøj, Thorkild, Misfeldt, Morten, Bundsgaard, Jeppe, Fought, Simon Skov og Hetmar, Vibeke (red.) (2017. *Hvad er scenariedidaktik?* Didaktiske studier, Aarhus Universitetsforlag.
- Høegh, Tina (2018). *Mundtlighed og fagdidaktik*, Didaktik serien, Akademisk Forlag.

- Kress, Gunther (2010). *Multimodality. Asocial semiotic approach to contemporary communication,* Routledge.
- Littleton, Karen and Mercer, Neil (2007). *Dialogue and the Development of Children`s Thinking. A sociocultural approach,* Routledge.
- Littleton, Karen & Mercer, Neil (2013): *Interthinking, Putting Talk to work,* Routhledge.

- Maine, Fiona (2015): Dialogic Readers. Children talking and thinking together about visual texts, Routhledge..

- Mckenney, Susan & Reeves, T. C. (2015) *Educational Design Research*, ResearchGate.

- Mercer, Neil (2000). *Words and Minds. How we use language to think together*, Routledge.

- Mercer, Neil (2004) *Sociocultural Discourse Analysis: Analysing Classroom Talk as a Social Mode of Thinking,* Journal of Applied Linguistics.
- Mercer, Neil and Hodgkinson, Steve (2010): *Exploring Talk in School*, Sage Publications.
- Reinking, David & Bradley, Barbara A. (2008). *Formative and Design Experiments – approaches to Language and Literacy Research,* Teachers College Press.
- Wegerif, R (2011) *Towards a dialogic theory of how children learn to think. Thinking Skills and Creativity.* 6 (3) 179-195, Researchgate.net.
- Wegerif, R. (2016). *Applying dialogic theory to illuminate the relationship between literacy education and teaching thinking in the context of the Internet Age*. Contribution to a special issue on International Perspectives on Dialogic Theory and Practice, edited by Sue Brindley, Mary Juzwik, and Alison Whitehurst. *L1-Educational Studies in Language and Literature*, p. 1-21.