

Dialogic Interactions in Digital Contexts: Multimodal, Multilevel and Temporal analyses

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ABSTRACT

The pervasive use of digital technologies in the ‘post truth’ era creates educational challenges as well as opportunities. In this session, we explore innovative ways of analyzing how young people can learn to engage in constructive dialogue through or around digital platforms. Taking a primarily methodological focus, we explore strategies researchers may use to analyze multimodal and multilevel dialogic interaction in technology-mediated learning environments. Further, we outline and consider challenges facing researchers in this area. Only by acknowledging such issues can we develop analytical strategies to mitigate against these in the future. Structured to maximize interaction, the session will promote sharing of ideas between those interested in approaches to analyzing the role of technology in supporting productive dialogue for learning.

SESSION SUMMARY

Overview

Maine, F. (2015). *Dialogic Readers: children talking and thinking together about visual texts*. London: Routledge.

Saville-Troike, M. (2003). *The ethnography of communication: an introduction* (3rd ed.). Oxford: Blackwell Publishing Ltd.

Van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in teacher–student interaction: A decade of research. *Educational Psychology Review*, 22(3), 271–297.

PAPER FOUR: Linking Discourses in a Wiki: Analysis of Primary Students’ Dialogic Interactions Across Time-spaces and Communicative Modes

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Objectives

1. To characterize the dialogic interactions students develop across time-spaces and in two communicative modes (oral and written-online) in a wiki project.
2. To explore methodological approaches for examining the role of wiki-technology in supporting the creation of collaborative learning opportunities across time-space contexts.

Perspective(s)

The use of digital technologies in human interactions modifies our ways of thinking and engaging in meaning making and knowledge creation (Säljö, 1999). Semiotic tools, characteristics of the task and the social construction of space-time configurations in the students’ technology-mediated learning practices are relevant in shaping the nature of collaboration and emerging interactions (Bloome et al. 2009). In this paper, I will report on *(i)* the analytical tool we developed to illuminate the social construction mechanisms across wiki paces and time *(ii)* the characteristics of students’ dialogic interactions to evaluate and build upon others’ ideas.

Method

Twenty-four 9-10 year-old students and one teacher participated in this study involving an online wiki-project in which students wrote a socio-scientific text collaboratively. Students were encouraged to make different space-time connections in multimodal and multilevel interaction: *a)* three different wiki-spaces (initial proposals, wiki-negotiation and wiki-writing text), *b)* a quite long temporal period (13 one-hour lessons), *c)* participating in two modes of communication (oral and wiki online-written asynchronous dialogue), and, *d)* in two levels of interaction (in-pair and small group).

We combined data collection methods of classroom interactional work and online interaction (both qualitative and quantitative). The data includes wiki logs and the face-to-face interaction transcripts. Socio-cultural discourse analysis (Mercer, 2004) was used to identify the characteristics of students' dialogues across time-spaces and modes of communication.

Results

The findings show the emergence of four types of dialogues across time-spaces and modes of communication: *a)* leadership and task management; *b)* mutual engagement in commenting and extending each other's ideas; *c)* group reflection dialogue about the progress of their own and others' work, and, *d)* group evaluation involving the assessment of each other's' ideas.

Importantly, students were involved in these four dialogues differently across time, spaces and modes of communication. Across time, the task characteristics and phases of the writing process were determinant. Furthermore, we found differences in how the distinct features of the four dialogues were displayed within the two modes of collaboration and wiki-spaces (e.g. in in-pair oral interaction, students displayed more mutual engagement and distributed leadership traits).

Significance

This study suggests that the orchestration of students' technology-enhanced collaborative learning across time-space contexts may facilitate the emergence of rich, open and multi-voiced dialogues. This is significant to help students in the post-truth era in which students have to be skilled in moving across fragmented spaces and times to elaborate a more constructive and multi-faced dialogue.

In addition to making a methodological contribution, this study contributes with empirical evidence to expand our knowledge on the role of technology in supporting productive multimodal and multilevel dialogues, which may foster the development of '*internet dialogue*' (Wegerif 2015) characterized by the intertwining of inside ('in-pair' talk) and outside (small-group wiki-written) dialogues.

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