

Multimodal Analysis Workshop: Visual Data

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Workshop format

- Introduction to multimodal analysis of video data: a focus on 1 study
- ‘Hands-on’ session
- Summary and discussion

Background to study

- investigate how 3-year-olds express and explore meaning at home and in playgroup during their first year in preschool
- how parent and staff perceptions of the children's communicative skills impact upon their perceptions of their abilities
- ethnographic video case studies

Research assumption 1

Ethnography:

As a first approximation, we can say that an ethnography is the written description of the social organization, social activities, symbolic and material resources, and interpretive practices characteristic of a particular group of people. (Duranti, 1997:85)

Research assumption 2

Case Studies:

... case study research is needed now more than ever before to challenge orthodox thinking, to get beneath the surface of policy implementation to reveal in-depth understanding and, most importantly, to take a quantum leap in how we come to understand complex educational situations.

(Simons, 1996: 231)

Multi-method data collection

Appendix 1: Data Collection Methods

Multi-method approach adopted to:

- give multiple avenues to multiple 'truths'
- gauge the reliability and validity of findings
- overcome the technical difficulties of recording young children's quiet voices in a noisy setting full of movement
- capture the multiple modes young children use for meaning making

'Transcribing' or 'Re-presenting' visual data

'Transcription as theory' (Ochs, 1979)

'All representations are misrepresentations'
(Stake and Kerr, 1994:2)

Multimodal data analysis

Appendix 2: Data Sets

- outputs from Video Recordings
(video clip and representations)
- outputs from Audio Recordings (observations
and interviews)
- outputs from Field Notes
- outputs from Research Diary

Multimodal analysis workshop

- 1) What are the analytic affordances and constraints of the different data sets?
- 2) What are the implications of multimodal analysis of video data for research terms such as 'text', 'text boundaries'?
- 3) What are the ethical, epistemological and practical implications of multimodal analysis of visual data?

Question 1

What are the analytic affordances and constraints of the different data sets?

Analytic affordances: audio data

- when utterances are transcribed, the printed text tends to 'take over' the spoken word
- words are physically separated from the speaker's voice, stripped of nuances
- utterances are extracted from the complexity of the rich and situated contexts in they were constructed
- silent participants often excluded or marginalized

Analytic affordances: video data

Video ...

- captures complexity, situatedness, dynamism and multimodality of interactions, symbolic and material resources
- permits silent viewings of data
- re-presentations reflect these characteristics
- bounded by a fixed lens: not stand alone tool

Purpose of analysis NOT to convert visual into verbal, but make links between data sets.

Analytic affordances: video data

Video Log

- makes complex data accessible (summary and time codes)
- useful for broad categorisation and coding
- sets particular activities in the flow of events

Analytic affordances: video data

Multimodal representation

- portrays sequencing and simultaneity of speech, gaze and movement
- separate columns create parallel 'dialogues', reader can choose between a focus on words, actions or gaze, or combination
- allows the study of central and 'peripheral participants' (Lave and Wenger, 1991)

Analytic affordances: video data

Still images/ single frames

- 'freeze' a particular moment in time
- permit detailed study of wealth of information eg positioning of children, gaze direction, posture, facial expressions
- give insights into the institutional setting eg local and sociocultural provision and understandings of early learning
- can be blurred or drawn for anonymity (but detail is lost)

Analytic affordances: Field and Diary Notes, Interviews

- **Field Notes** offer wider perspective, what is happening beyond video lens; permit analytic links between data sets; record spontaneous participant and researcher comments
- **Diary Notes** comparison with other moments in time; cross-case comparisons; link data to theory; site for methodological and subjective reflection
- **Interviews** participant perspectives; links across sites of study; rich personal detail; clarify opaque layers of institutional, social and cultural influences

Question 2

What are the implications of multimodal analysis of video data for research terms such as 'text', 'text boundaries'?

Research terms: Text

Multimodal analysis ...

- highlights new 'texts' as legitimate for enquiry, transforming canonical, word-based notions of 'text'
- reveals texts as processes: physical processes of production integral to meanings
- dispels notion of language as sole guarantor of rationality as multiple modes display functionality
- takes into account the ensemble of semiosis: language as one dimension of multimodal semiotics

Question 3

What are the ethical, epistemological and practical implications of multimodal analysis of visual data?

Implications of visual data

- ***Ethics***: permissions; respecting all participant and non-participant rights; visual data and anonymity; ongoing informed consent
- ***Subjectivity***: processes of interpretation; subjective reflections; being participant observer
- ***Practicalities***: selecting recording equipment; handling and storing data; time consuming nature of multimodal analysis

Conclusions

Multimodal analysis of video data in an educational setting ...

- challenges many established methodological practices and assumptions
- captures the multi-sensory, multimodal dynamism of children's meaning-making
- makes '*a quantum leap in how we come to understand complex educational situations*'
(Simons, 1996:231)