Re-examining education research methodological practices

Conference or Workshop Item

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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)
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)
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)