

Classroom Structuration and the Development of Representations of the Curriculum

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Research questions

- how does the social structuration within the classrooms influence the development of children's social representations of the curriculum?
- how do children's social representations of the curriculum develop over time?

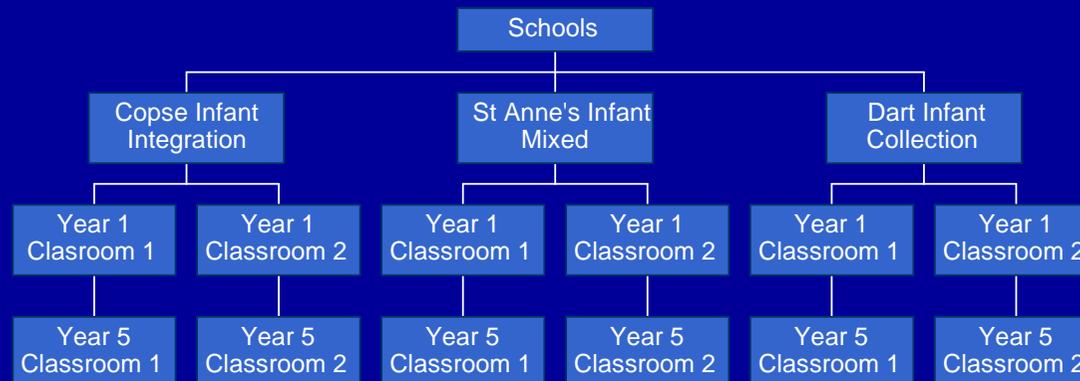
Research strategy

- Selected schools with 3 types of curriculum
- Ethnographic study lasting 2 years (1994-1996)
- Two parts - map classroom stucturation
 - » - investigate children's reconstructions of the curriculum

The classrooms

- Integration , mixed, collection type
- 2 year groups
 - year 1 (age 5/6)
 - year 6 (age 9/10)

THE CLASSROOMS



Ethnography

- Classroom observation (10 days each classroom) recorded as fieldnotes, event sampling - video
- Participant observation - ask children questions while they were undertaking activities
- Informal interviews with teachers, headteachers
- Reviewed documents, schemes of work, work sheets
- Photographed aspects of material culture
- Designed research instruments to investigate children's re-constructions of the curriculum
- Administered the instruments to teachers (12) and children (230)

- Initially the classroom observation was informed by the literature review -Bernstein's theory of educational codes and the principles of classification and framing. Previous theoretical and empirical work on recognition and realization rules (Bernstein, 1981, 1990; Diaz, 1984; Daniels, 1989; Morais, 1992; Singh, 1993; Whitty, Rowe and Aggleton; 1994a &b) Daniels' (1988) work pointed to the role of classroom displays as semiotic relays. Work on the material culture of the classroom and the marking of equipment and toys relating to the development of gender identities in primary school classrooms (Lloyd and Duveen, 1992)

Classrooms as semiotic fields

- Teacher's social representation of the curriculum is instantiated in everyday classroom practice
- teachers' everyday classroom practice and discourse maintains different contexts
- e.g, chairs placed in a circle are intended to provide a different message to chairs placed in rows behind desks
- teachers mark spaces, objects and other aspects of the material culture of the classroom with significant meaning

Languages of description modelling classroom structuration

- The deep structure of classroom practice relates to the clues which differentiate specialist contexts with the classroom. These are the recognition and realisation rules which provide semiotic markers for school subjects. Having chosen schools with different types of curriculum, the model had to relate empirical observation to forms of structuration in a way that would allow another researcher to identify those aspects of practice. In order to achieve this, a typology of recognition and realisation rules was constructed after the ethnographic work had been completed. The subsystems evolved through a process of reflection moving between fieldwork notes and the theoretical concepts particularly Bernstein's notions of visible and invisible pedagogy and the two models for recontextualising knowledge.

Typology of R & R rules

Eight semiotic layers:

- Place
- Equipment
- curriculum structuration
- time intervals
- setting and grouping
- space and movement
- wall displays
- teachers' classroom discourse.

- **Table 3 Typology of Recognition and Realisation Rules**

• Tending towards	Tending towards
• Closure / restricted	Openness / less restricted
• Visible pedagogy	Invisible or less visible pedagogy
• 1 PLACE, Classroom lay out	
• In the school	
• specialist space (e.g. art room, hall)	-----in the classroom
• In the classroom	
• spaces are enclosed	-----spaces are open
• spaces have specialist functions	-----spaces have multiple functions
• space is private	-----space is public
• spaces are individual	-----spaces are communal
• furniture positioned in lines, rectangles	
• rectangular and square tables	-----round tables
• tables face the teacher's table or board	-----tables face each other
• desks with individual storage space	-----communal tables
• children have their own place	
• storage room at individual places	-----individual drawers in a communal trolleys

- 2 EQUIPMENT, Material culture

- property
- private-----public
- individual-----communal

- children own personal everyday equipment-----everyday equipment is communal (e.g. pencil, pen)
- children keep subject specific items-----kept in communal places (e.g. exercise books, text books)
- children can access specialist equipment-----teacher controls specialist equipment (e.g. apparatus, paint brush)

- 3 CURRICULUM STRUCTURATION

- activity has an identifiable beginning-----arises in an ad hoc way
- activity has a set procedure-----the procedure is novel
- activity has an identifiable end-----the end is contingent

- 4 TIME INTERVALS

- regular and often (predictable) -----irregular and infrequent (e.g. happens each day or week) (e.g. one-off activities)
- short time cycle-----long time cycle (e.g. a few minutes) (e.g. across a term)

• **Table 3.5** **Subsystem for identifying and describing curriculum structuration**

•

• **Beginning**

•

a specific time slot in the week

•

a specific or predictable pattern for introducing the activity, such as a initial instruction, e.g. verbal, written on the board/worksheet/text book

•

a specified place where the activity takes place

•

a specific set of equipment

•

a specific exercise book, type of paper, or folder

•

a specific text book, worksheet format (from a series, teacher's handwriting), work card

•

• **Middle**

•

an intelligible task to complete

•

a set amount of time to complete the task

•

a product e.g. a written text, graphic illustration or artefact

• **End**

•

a specific place to submit the task, e.g. give an exercise book to the teacher, put worksheets in a specific tray

•

a means for receiving feedback, e.g. verbal feedback, the child marks the work, a peer marks the work, the teacher marks the work

•

feedback can be intermittent, regular or both

•

awards, such as stars, stickers, certificates or a comment from the teacher

•

The developmental aspect of this study sets out to investigate the relationship between the material culture (signifiers) and the development of children's cognitive strategies. It investigates the categories through which children re-construct the curriculum at two specific moments: during the second year (Year 1) and the sixth year (Year 5) of primary schooling. In re-constructing the curriculum children situate themselves in classroom life and construct social identities.

- The code relating signifiers and signified in sign systems is furnished by social representations. While a knowledge of a code is required to become an actor in the sign system, such knowledge alone is not sufficient for the development of an internalised social identity.

(Lloyd and Duveen, 1990, p. 44)

Investigating children's re- constructions of the curriculum

- Specially designed instruments - aimed at re-presenting aspects of classroom structuration
- Kelly's grid
- Sorting task

- Participant observation

The Sorting Task

- Twenty objects used regularly for mathematics, language, reading, art and physical education and six other activities were identified for use in the sorting task.
- Each object was photographed separately against a white background.
- The task was administered through individual interviews conducted in a quiet place outside the classroom.

Kelly's Grid

- modified version of Kelly's (1955) repertory grid technique.
- Kelly's theory has been adapted for use in many other contexts (see e.g. Bannister and Fransella, (1977)
- Fransella (1984) has drawn attention to the applicability of the technique for investigating social representations.
- The 'Commonality Corollary' in Kelly's theory maintains that aspects of a psychological space that are held in common between groups of people and within one group can be mapped.
- Within the developmental field, Salmon (1977) has suggested that construct
- theory could be used to examine the qualitative changes in understanding described by Piaget.

The second instrument asked children to separate curriculum categories into similar and different groupings and investigated which categories were kept apart and which were combined.

Procedure & Analysis

- Children were presented with twenty objects from the material culture of their own classroom and asked to sort them in any way they wanted.
- After the first sort they were asked to sort the objects a second time using a different method, if possible.
- After each sort they were asked to justify their groupings.
- Their talk was audio recorded and later transcribed in full.
- The sorting task yielded both quantitative and qualitative data.

Language of description

- Coding scheme
- The code relating signifiers and signified in sign systems is furnished by social representations
- Feature
- Function
- Structure

Table 3.6 Codingscheme for children's talk

FEATURET ALK

1	Context dependent, based on visual perception. Includes naming objects from the photographs, listing objects on the photographs, classifying them by colour, shape, size or orientation. Descriptions independent of specialist discourses	
1a	Non-school objects:	
	Red on it, red on it	year 1
	All paper	year 1
	Made out of metal	year 5
	These are things that are handled	year 5
1b	School objects	
	Book group	year 1
	That's money and that is the same colour as the pencils	year 1
	Both to do with words	year 5
	Stationery, pens and paints	

FUNCTION

2 Self referred to as the subject in a general classroom activity or performing a function with objects visible on the photographs.

Descriptions are characterised by action verbs which refer to classroom activities.

2a About the activity. The classroom activity is the grammatical or implicit subject of the sentence. Specialist discourses are referred to as adjectives. This section includes 'work' which is an undifferentiated curricular activity.

They look the same, they are all work.	year 1
Cos books, these books can go in that book bag.	year 1
All art things	year 5
Because they are all different sorts of books like reading books, writing books, dictionary, spelling and English book.	year 5

2b About self and others. Children describe themselves or others performing classroom activities. Specialist discourses are not referred to by name.

We can write in our books.	year 1
We can use the scissors to cut them out. We've got some right and some left. Normally we can cut the paper out and glue them onto the red and blue books.	year 1
You can read them all.	year 5
These are all things that you use for work like pens, and scissors and things.	year 5

STRUCTURE TALK

3 Specialist discourse. The specialist discourse is named. This section also includes uses of abstraction verbs, such as learn, concentrate, calculate and practice.

3a About the specialist discourse and self or others. A specialist discourse is named and the self or others are mentioned.

I put these scissors together because the work we done was year 1
maths.

We're learning about the alphabet. We need to know if it's a year 1
capital letter or not.

Well I am not sure about the scissors, but the calculator and these
are all used for maths, and that's why I put them together.

The scissors I put together because we normally use them year 5
in maths.

Both like paint, both to do with art. year 5

3b About the specialist discourse only. A specialist discourse or known topic label within a specialist discourse is the grammatical subject of the sentence. The self or others are not mentioned.

To do with history. The history book. year 5

This is the English group because you've got dictionary,
computer, an English board and an English folder. Now
English board has got all types of English, magic, and the
computer is mainly used for English. year 5

Analysis

- The **number** and **content** of groupings produced by children in each classroom was investigated
- Cluster analysis provided a descriptive analysis of the objects that were grouped together most frequently in each classroom.
- Talk used to justify groupings was coded using the coding scheme described below. Quantitative data was then subjected to statistical analysis.

Table 63 Clusters identified in the infant classrooms

	Copse School	St Helen's School		Dart Infant School		
	Integration Classroom1	Classroom2	Mixed Classroom3	Classroom4	Collection Classroom5	Classro
Sort 1	Ex. Book s+ Colou ring	Worksheets	Sticking	Book s	Book s Book s	Penc ils
	Reading Painting	Sticking Reading Painting Maths Play Play	Reading Painting	Wor k Play	Reading	Readin Letters
Sort 2	Worksheets Reading	Play				
Sorts 1 & 2	Worksheets Reading	Reading Paining Maths Play	Painting	Reading	Reading	Readin

Subject categories are given in bold.

+Ex. Book s' refers to exercise books as opposed to 'Book' which refers to text books and reading books.

^Letters refers to worksheets and a display which had the 'letterland' style letters on them.

Table 6.4 Clusters identified in the junior classrooms

School	St Anne's School		Dart Junior School			
	Integration Classroom7	Classroom8	Mixed Classroom9	Classroom10	Collection Classroom11	Classro
Sort 1	Equ ipmen t* Ex.Book s+	Equ ipmen t Ex.Book s	Equ ipmen t	Equ ipmen t	Equ ipmen t Electrical Display s Pape r Book s Ex.Book s	Equ ipm Electric Display Pape r Book s Ex.Bo c
	Reading Art Engli sh	Reading Art	Reading Art Handwriting Maths/Topic	Reading Art Handwriting Maths		

Conclusions

- The effects of different types of curriculum structure become more apparent at Year 5.
- Difference in the cluster solutions in Dart School with a collection type curriculum in comparison to others
- This was matched by a greater quantity of structure talk

- It was in this classroom -11 - that children readily used subject names when talking about the non-curriculum groups they had produced and this drew attention to the possibility that the children in Dart School may have been choosing an alternative classification to sort objects rather than not having access to conventional adult curriculum categories.

- The shift away from feature talk and towards structure talk indicated a qualitative transformation in the process of signification between Year 1 and Year 5
- The sorting task has demonstrated that classrooms are local cultures which make the curriculum available to children in different ways
- That as children gain experience of schooling their social representations of the curriculum become more elaborate.

- When the curriculum structuration is particularly strong, as in Dart School,
- children may well reserve their specialist curriculum categories for tasks which they recognise as part of the school culture.
- It may have been that in the school with the collection-type curriculum, the social representation of the curriculum had become strongly framed,
- only to be applied within specialist contexts.
- There seemed to be considerable resistance to applying this knowledge in other contexts, for example in the context of the experimental task.

Works on Bernstein – including mapping classrooms a semiotic fields

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Works on gender emerging in classroom practice

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Investigating young people's social representations of Art

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