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# CAQDAS – COMPUTER ASSISTED QUALITATIVE DATA ANALYSIS

STUDIOCODE  
BUSINESS GROUP

The logo for StudioCode Business Group features the word "STUDIOCODE" in a bold, blue, sans-serif font. The letter "O" in "CODE" is replaced by a blue shield-shaped icon with a white circle inside. Below "STUDIOCODE", the words "BUSINESS GROUP" are written in a smaller, grey, sans-serif font.

NVIVO

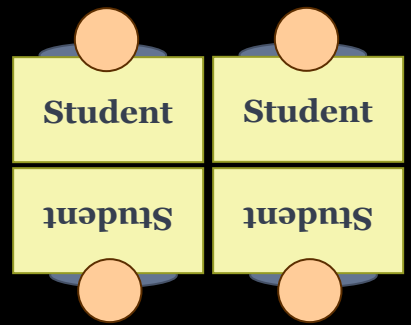
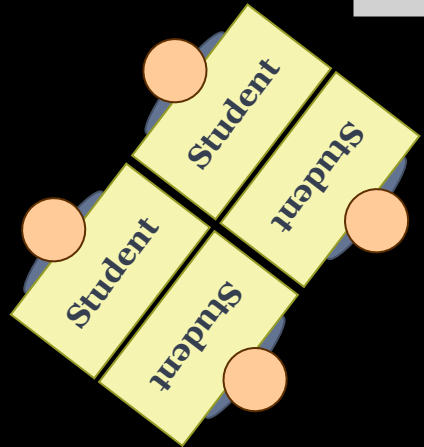
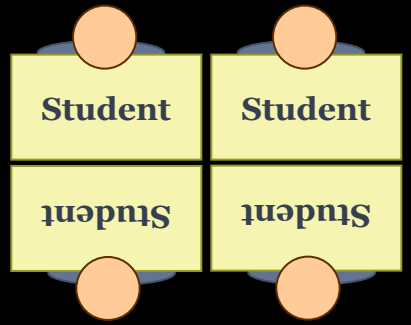
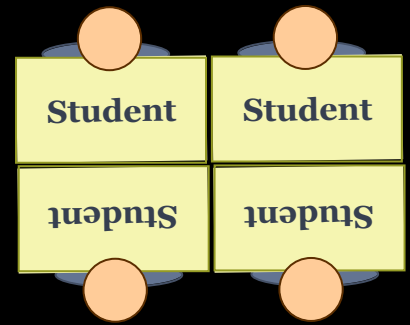
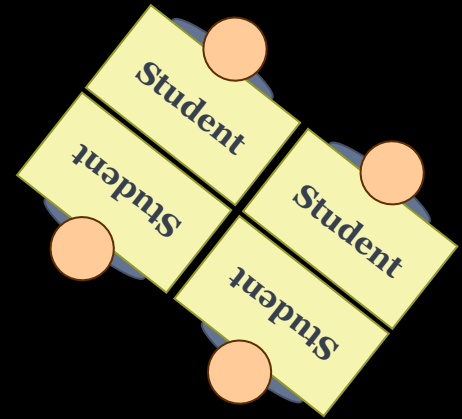
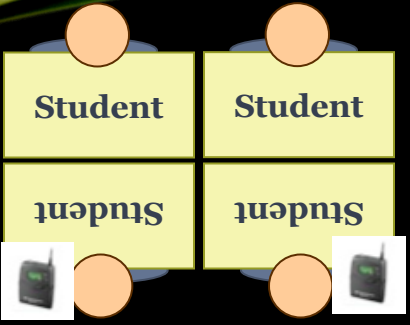
The NVivo logo consists of the word "NVIVO" in a blue, sans-serif font. To the right of the text is a blue icon composed of four diamond shapes arranged in a 2x2 grid, with a white circle in the center of each diamond.

vosaic™

The Vosaic logo features a stylized icon on the left made of four overlapping triangles in shades of blue, purple, and teal. To the right of the icon, the word "vosaic" is written in a blue, lowercase, sans-serif font, followed by a trademark symbol (™).

# VIDEO DATA





# GENERATING VIDEO DATA



# DOCUMENT ANALYSIS

- *Document analysis 'has been a staple in qualitative research...What has been rather glaring is the absence of sufficient detail in most reports found in the reviewed literature, regarding the procedure followed and the outcomes of the analyses of documents'.*

-Bowen, 2009

- *Documents of all types can help the researcher uncover meaning, develop understanding, and discover insights about the research problem.*

-Merriam 1998

# DOCUMENT ANALYSIS

- Efficient
- Availability
- Cost-effectiveness
- Lack of obtrusiveness and reactivity
- Stability
- Exactness
- Coverage
- Insufficient detail
- Low retrievability
- Biased selectivity

# DISASSEMBLING DATA

- After organising your data, begin to 'Disassemble' your data by formally coding them (there are other ways to do this, but we focus on coding).
- This is a process of going back and forth between the literature, your framework for analysis, the research question and the data.
- At every stage, remember to use memos. Record what constitutes an example of a code and what does not. Build your definitions using this 'evidence'.

# BEFORE



# AFTER

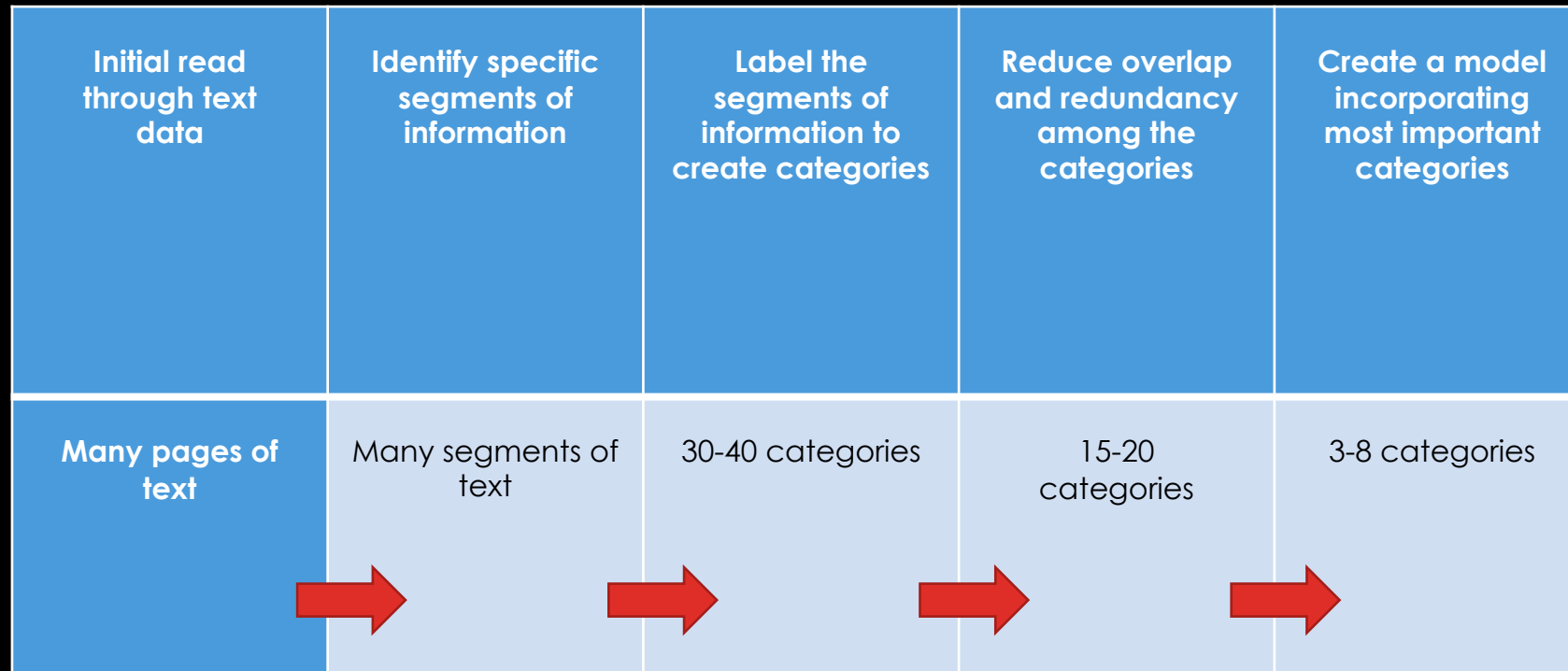




# INITIAL CODES, LEVEL 1 CODES AND FIRST PASS CODES

- First pass codes can be very similar to the words and terms used in the data. Some of the level 1 codes can be related and later subsumed into one conceptual category.
- The second pass/level 2/category codes are at a higher conceptual level

# The coding process in inductive analysis



*Note: Adapted by Ziebell (2015) from Creswell, 2002, figure 9.4, p. 266 (Thomas, 2003).*

School: Melbourne School 3

Subject: Year 5 maths


Date: 1 June, 2011

Researchers and Technicians present: Natasha, Cam, Reggie

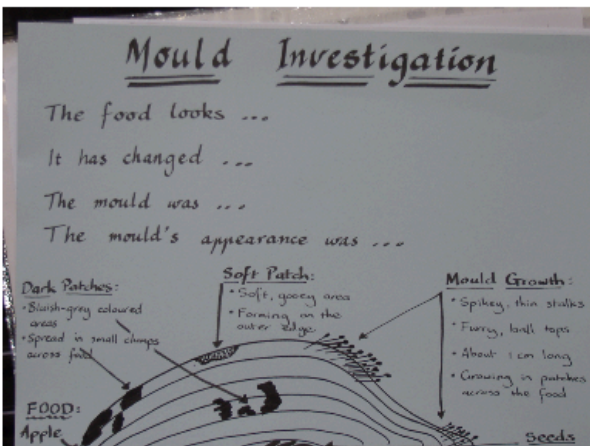

Teacher's Goal: Fractions greater than, less than and equal to one half. Ordering and comparing fractions on a number line.

number: Lesson number 3 (out of 5)

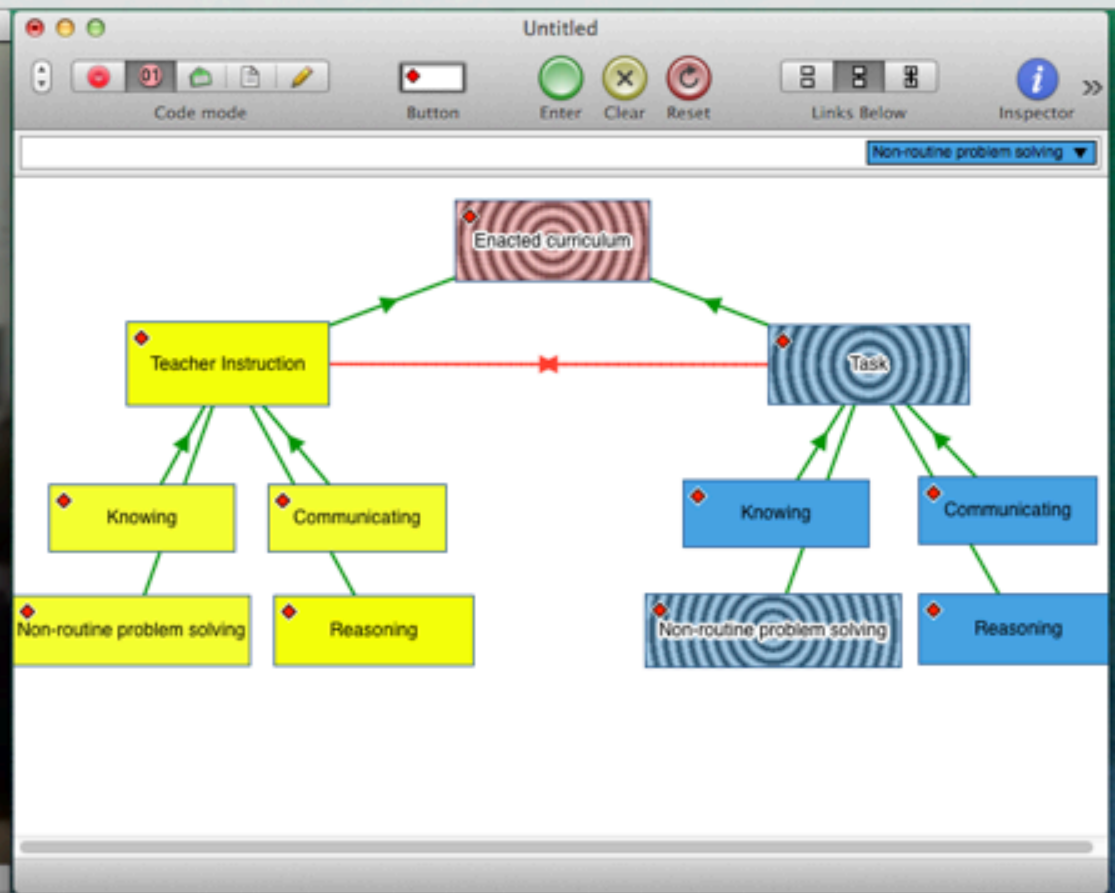
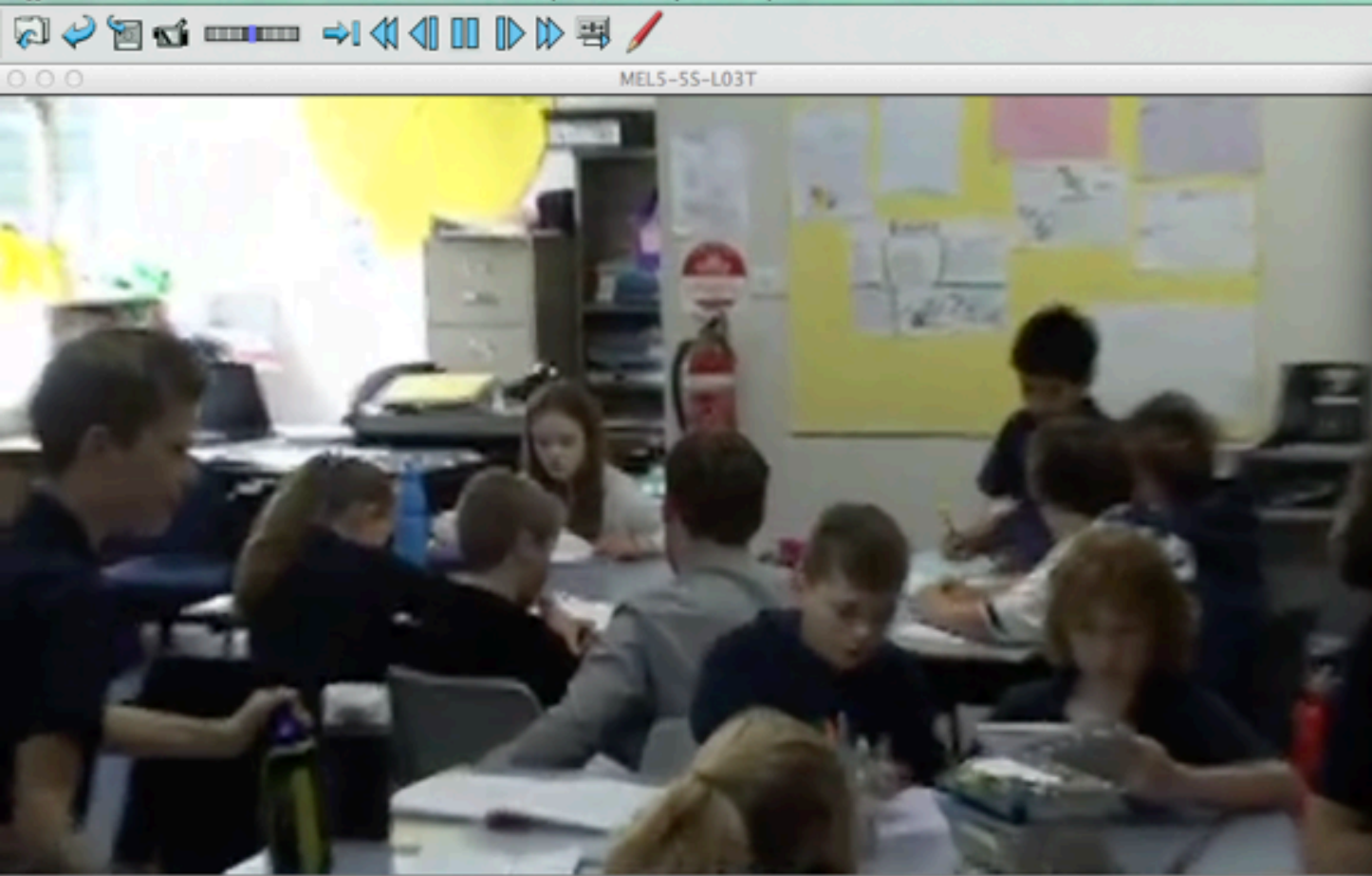
Time	Organisation of Interaction		Description of Activity	Description of Content
	Framing	Focus Group		
0:00	Classwork	<u>Sofija, Shirrine</u> Listening to teacher.	<b>Demonstration and students participating.</b>	Students are given a fraction card ("secret fraction on sticky note"). Equivalent fractions, fractions <, fractions >. On board: $1/3=2/6$ . <u>Identify numerator</u> and denominator Explanation of how an equivalent fraction is worked out. X2 top and bottom. Students name fractions greater than a half. On board: $3/6=1/2$ . Teacher explains another way that fractions can be worked out rather than halving. X3.
08:12	Classwork	Students find their group members.	<b>Setting up the task</b>	Students find others that have the same denominator as them and sit together as a group.
11:20	Seatwork	Students working on group task.	<b>Students working on task (in groups)</b>	Students are given a number line and students sequence and order their fractions on the number line between 0 and 1. <u>Students</u> stick their 'sticky note' containing a fraction on the <u>group's</u> number line.
12:30	Classwork	Listening to teacher.	<b>Sharing.</b>	Teacher puts number lines on the white board directly underneath one another.

					
13:45	Seatwork	Listening to teacher.	<b>Teacher talk.</b>	- Comments on the location and position of fractions that look to be aligned but are not equivalent. Identifies other equivalent fractions. Students comment on the spacing of the <u>numberlines</u> .	

# CONSTRUCTING A LESSON TABLE

16:10	Classwork	Sitting on the floor listening to the teacher.	<b>Setting up the task</b>	<p>Instructions for using magnifying glasses to make observations of mouldy food. Students record what they have seen in their journals. Example with sentence starters on the board.</p>  <p><u>Mould Investigation</u></p> <p>The food looks ...</p> <p>It has changed ...</p> <p>The mould was ...</p> <p>The mould's appearance was ...</p> <p><b>Dark Patches:</b></p> <ul style="list-style-type: none"> <li>• Blush-gray coloured areas</li> <li>• Spread in small clumps across food</li> </ul> <p><b>Soft Patch:</b></p> <ul style="list-style-type: none"> <li>• Soft, gooey area</li> <li>• Forming on the outer edge</li> </ul> <p><b>Mould Growth:</b></p> <ul style="list-style-type: none"> <li>• Spiky, thin stalks</li> <li>• Furry, ball tops</li> <li>• About 1 cm long</li> <li>• Growing in patches across the food</li> </ul> <p><b>FOOD:</b></p> <p>Apple</p> <p>Seeds</p>
22:00	Seatwork: In groups	Students working on task	<b>Students working on task</b>	<p>Students working in groups. Making observations of mould on food.</p> 
24:00	Seatwork: Individual	Working on task in small group. 31:05: Teacher asks students what they have found.	<b>Students working on task</b>	<p>Teacher roaming. Teacher prompting students to come up with answers to some of the key things needed to be recorded. Colour, moisture, texture. Comparing bought bread to the bread the students made. What do the preservatives do?</p>

# Observations



00:12:41.63

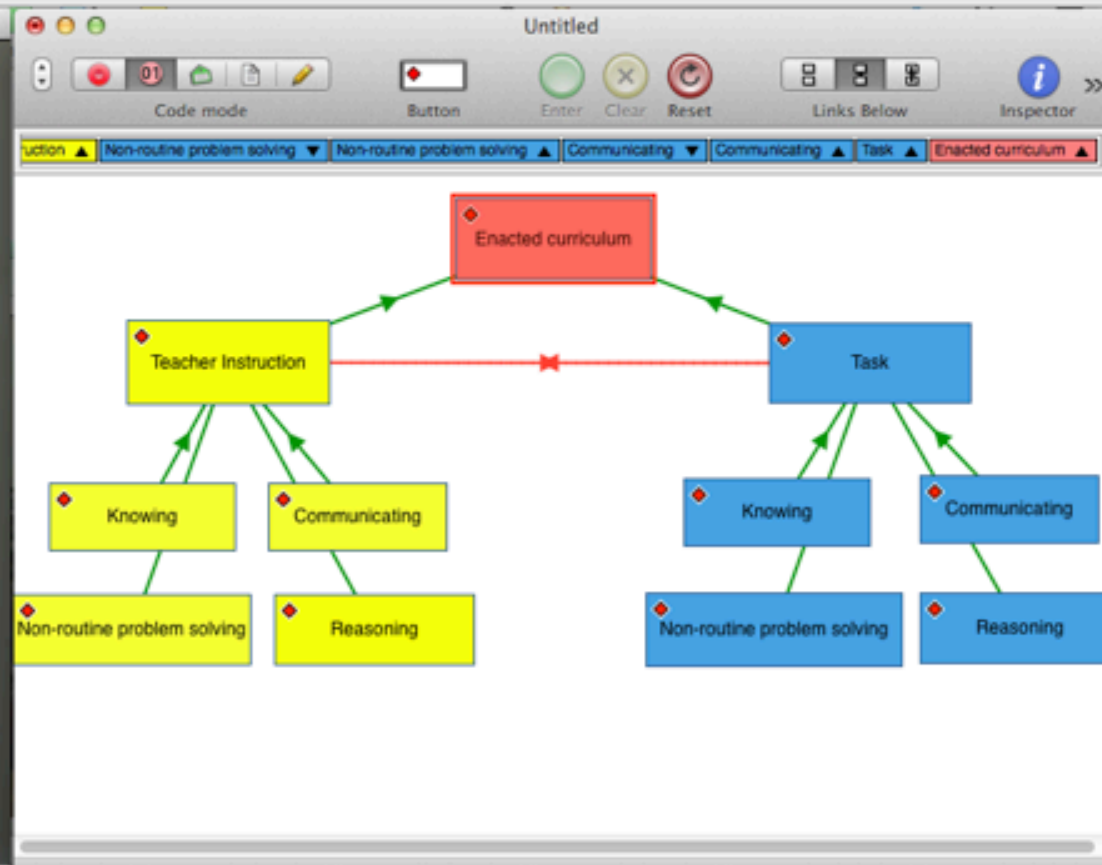
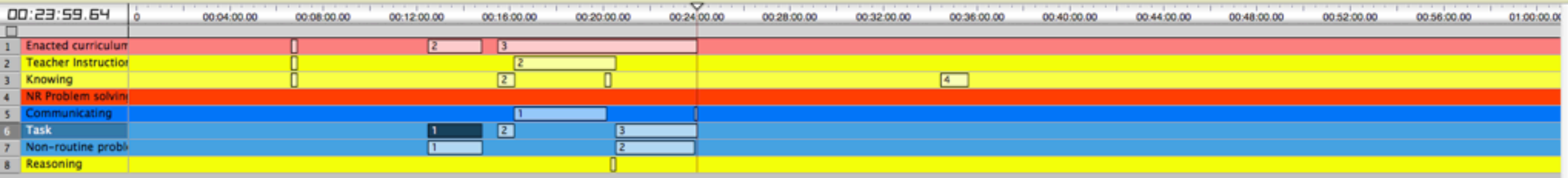
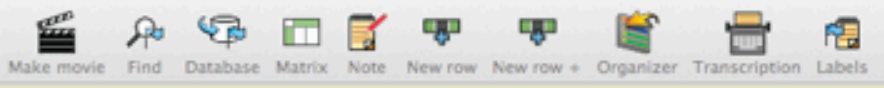
Track	Start Time	End Time	Label
1	00:00:00.00	00:03:00.00	Knowing
2	00:00:00.00	00:03:00.00	NR Problem solvin
3	00:00:00.00	00:03:00.00	Communicating
4	00:00:00.00	00:03:00.00	Teacher instructio
5	00:00:00.00	00:03:00.00	Enacted curriculum



MEL5-SS-L03T



MEL5-SS-L05Timeline



merge rows Make movie

Append slow  Text tracks  
 Static text  Overlay text

lines 2

Find Database Matrix Text New row New row + Organizer Transcription Labels

00:59:07.84 0 00:04:00.00 00:08:00.00 00:12:00.00 00:16:00.00 00:20:00.00 00:24:00.00 00:28:00.00 00:32:00.00 00:36:00.00 00:40:00.00 00:44:00.00 00:48:00.00 00:52:00.00 00:56:00.00

1	Assessment	1	2	3
2	Formative Asses	1	2	3
3	Formative Asses			
4	Summative Asses			
5	Numbers and Cal	1		
6	Knowing	1		
7	Performing		1	
8	Communicating	1		

zoom in + zoom out -

merge rows Make movie

Append slow  Text tracks  
 Static text  Overlay text

lines 2

Find Database Matrix Text New row New row + Organizer Transcription Labels

00:59:41.08 0 00:04:00.00 00:08:00.00 00:12:00.00 00:16:00.00 00:20:00.00 00:24:00.00 00:28:00.00 00:32:00.00 00:36:00.00 00:40:00.00 00:44:00.00 00:48:00.00 00:52:00.00 00:56:00.00 01:00

1	Assessment	1	2	3	4	6	7	8	9	10
2	Formative Assessment FOR Learning	1	2	3		6	7	8	9	10
3	Formative Assessment AS Learning									
4	Summative Assessment									
5	Knowing	1	2							
6	Numbers and Calc	1	2			4	5	6	7	8
7	Performing					1	2	3		
8	Making connections									
9	Working mathematically							1		2

zoom in + zoom out -

# VOSAIC



Amy Day 1

Moments Form

Change Button Form

Teacher Self-Reflection ADD BUTTON

- Active Engagement [A] ✎
  - Tags
- Meeting Students Needs [S] ✎
  - Tags
- Assessment [D] ✎
  - Tags
- Other [F] ✎
  - Tags

Strengths Teacher Self-Reflection Custom (for this video only)

Active Engagement			Active Engagement		
Meeting Students Needs		Meeting Students Needs			
Assessment	Assessment		Assessment		Assessment
Other					
Active Engagement			Active Engagement		
Meeting Students Needs		Meeting Students Needs			
Assessment	Assessment				
Other					Other

DRAG TO ZOOM



# PROJECTS IN INITIAL TEACHER EDUCATION

- **How does a teacher's questioning elicit different types of responses?**
- **Is there alignment between how research defines feedback and how feedback is enacted in classrooms?**
- **To what extent does teacher questioning within object based experiences support historical inquiry?**
- **In what ways do the teacher and students use English (L1) in a CLIL classroom?**
- **How is gesture used as a pedagogical tool to support second language learning in a year 1 classroom?**
- **To what extent are students able to develop their fundamental motor skills based on teacher feedback during active physical education?**
- **How do teachers use verbal cues to facilitate activity of students in a primary physical education class?**

▼ ● Challenges of unit implem...	3	11
● Learning	3	4
● Essential content	3	9
● Learning	4	12
● Other comments	3	4
● Planning	1	2
▼ ● Positive comments	3	4
● History of work	3	8
● Indigenous connections	4	9
● Museum as a business	3	4
● Musuem	4	16
● Pre-excursion activity...	2	6
● World Trade Game	4	11
● Resources	4	9
▶ ● Source Analysis	0	0
▼ ● Suggestions for improve...	1	1
● Market day	1	1
● Museum excursions	4	43
● Teacher decision-making	4	15
● Visiting museums	4	15
● Working with Musuem an...	3	15

NVivo is CAQDAS

*In vivo – assigning labels to a section of data using a word or short phrase from the data.*

Illustrative words from original field notes	Initial code (Level 1)	Category code (Level 2)
1. "Samantha brought homework home, but she did not always have the right assignment."	Student oversight	Barrier for getting homework done
2. "Whenever Samantha asked her mother to collaborate in doing the homework, her mother was usually busy."	Parent unavailability	Barrier for getting homework done
3. "When her mother was available, she would frequently allow herself to be interrupted and not return to work with Samantha."	External interruption	Barrier for getting homework done
4. "Samantha's teacher reported that Samantha seemed to be exceedingly talented, and the teacher did not readily understand why the homework assignments were such a problem."	Positive teacher's views	Positive expectations (for getting homework done)
5. "Samantha expressed enjoyment in doing schoolwork and looked forward to her homework assignments."	Positive student's views	Positive expectations (for getting homework done)

Level 1	Level 2 (Coverage code)	Level 3 (Occurrence code)
Assessment	Formative	Knowing
		Performing
		Reasoning
		Non-routine problem solving
		Communicating
		Unclassified
	Summative	Knowing
		Performing
		Reasoning
		Non-routine problem solving
		Communicating
		Unclassified

# INDUCTIVE AND DEDUCTIVE ANALYSIS

- Inductive analysis = generating theory that emerges from data (starts with a research question)
- Deductive analysis = tests theory (starts with a hypothesis). In qualitative research, you can begin with codes and improve them depending on the information that emerges from the data analysis.

# REASSEMBLING THE DATA

- Look for patterns in the data (studiocode timeline, memos) when reassembling your data
- You might combine your level 2 codes into level 3 codes whereby themes and theoretical concepts emerge.
- Spend some time 'playing with the data'.



Text Search Criteria Run Query

Search in: **Files and Externals** Selected Items Items in Selected Folders

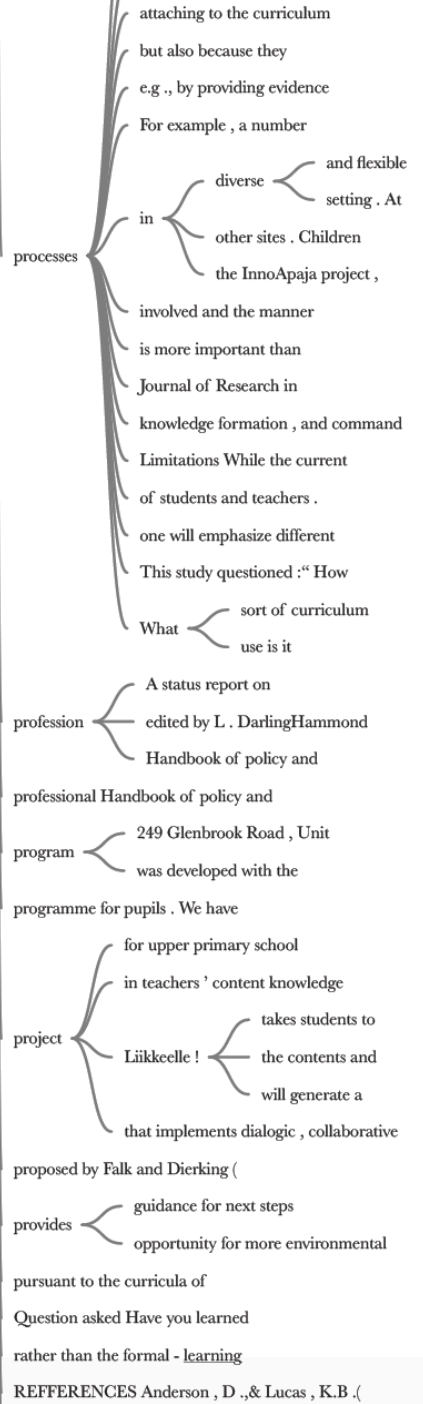
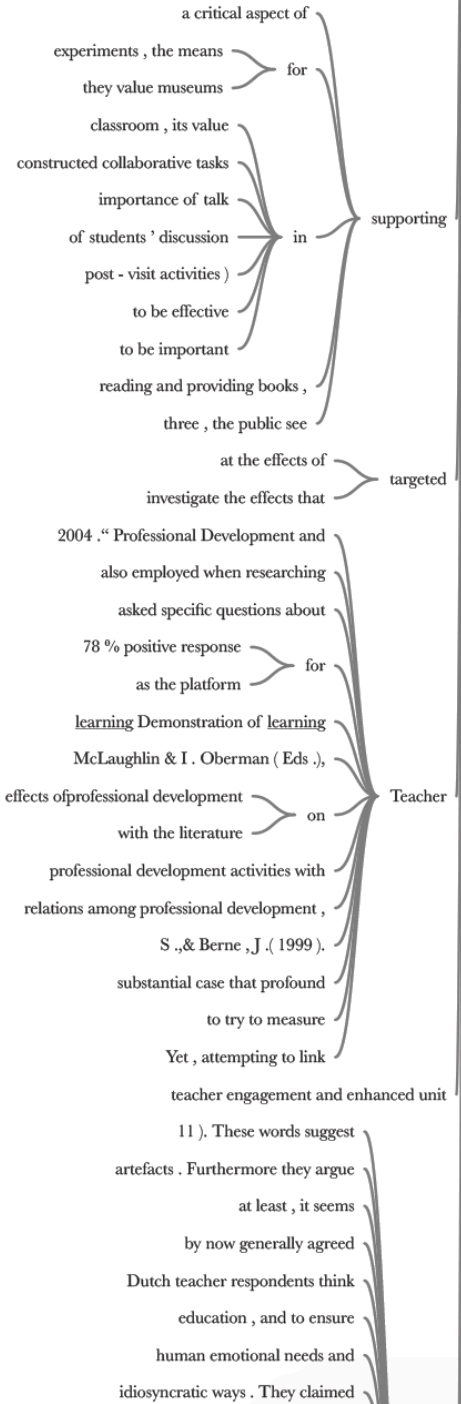
Search for:  Special

# TEXT SEARCH QUERIES

Summary Reference Word Tree

File Name	In Folder	References	Coverage
3-5_HASS ~ The Austral...	Files\\History Curriculum...	3	0.15%
6_HASS ~ The Australia...	Files\\History Curriculum...	3	0.25%
AI_Interview 2_2018.06...	Files\\Teacher Interviews	9	0.30%
Americal Association of...	Files\\Literature Review	28	0.71%
An1_Interview_27.06.201...	Files\\Teacher Interviews	7	0.20%
Anderson_Childrens mu...	Files\\Literature Review	70	0.67%
Anderson_Zhang_2003	Files\\Literature Review	5	0.10%
Anderson, Lucas and Gi...	Files\\Literature Review	44	0.37%
Andre_MuseumsAsAven...	Files\\Literature Review	323	1.53%
Arts Council 2011_A revi...	Files\\Literature Review	37	0.32%
Bamberger_Multiple out...	Files\\Literature Review	116	1.03%
Birney_Criteria for succe...	Files\\Literature Review	71	0.66%
Birney1988_Criteria for...	Files\\Literature Review	71	0.66%
Buczynski_Impact of pr...	Files\\Literature Review	38	0.32%
Clyne 2015_History in Pl...	Files\\Literature Review	4	0.16%
Cobb 2003_Design Exp...	Files\\Literature Review	66	0.90%
Cooper_Why are there n...	Files\\Literature Review	27	0.32%
Coppersmith_Integratin...	Files\\Literature Review	105	0.83%





# WORD TREE

# REFERENCE

▼ Text Search Criteria Run Query ▼ Save Results...

Search in: **Files and Externals** Selected Items ▼ Items in Selected Folders ▼

Search for:  Special ▼ Finding matches:  
 Exact match only (e.g. "ta  
 Include stemmed words (

**Summary** **Reference** Word Tree

[Files\\Literature Review\\Americal Association of Museums Excellence in Practice](#)  
28 references coded, 0.71% coverage

*Reference 1: 0.03% coverage*  
processes in place for assessing learning. Federal agencies and nonprofit foundations

*Reference 2: 0.03% coverage*  
audience in vital and meaningful learning experiences. It stresses the importance

*Reference 3: 0.03% coverage*  
assessment provide evidence of visitor learning and the museum's impact;  
• appropriate

*Reference 4: 0.03% coverage*  
to knowledge and self-directed learning;  
• the museum working environment is

*Reference 5: 0.03% coverage*  
factors affect the personal, voluntary learning that occurs in museums. They

*Reference 6: 0.03% coverage*

# NODE MAP

