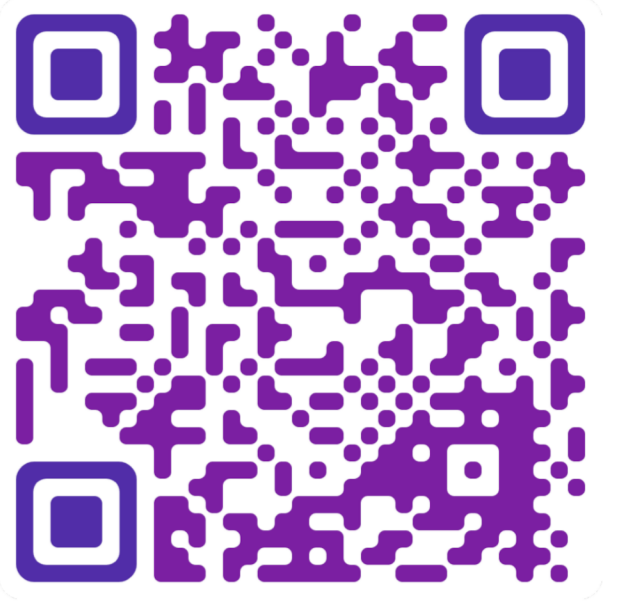


Seeing what they think

Using MAXQDA to explore how concept maps work

Dr Martin Johnson
martin.johnson@cambridge.org



CONTEXT

In England around 40,000 teachers work as examiners each year. They are responsible for assessing school and college students' examinations.

Assessment Literacy

Our life experiences of assessment – our history of being assessed and of assessing others – all influence our assessment literacy

Our assessment knowledge

Our assessment skills

Our beliefs and feelings about assessment

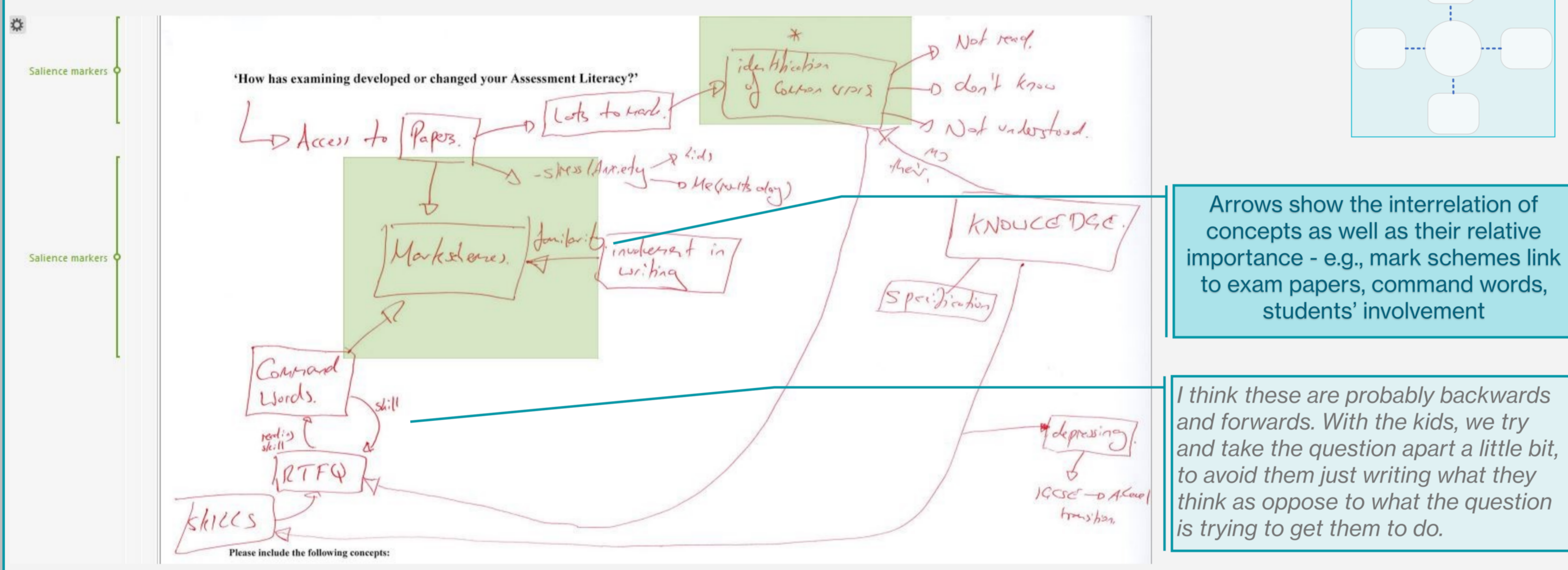
How do concept maps work?

PROJECT AIM

METHOD

We worked with 8 teachers. We asked them to make concept maps using the question: **How has examining developed or changed your Assessment Literacy?** We then carried out narrative interviews. We used MAXQDA to analyse and code the components of the maps to understand how they supported and represented the teachers' thinking.

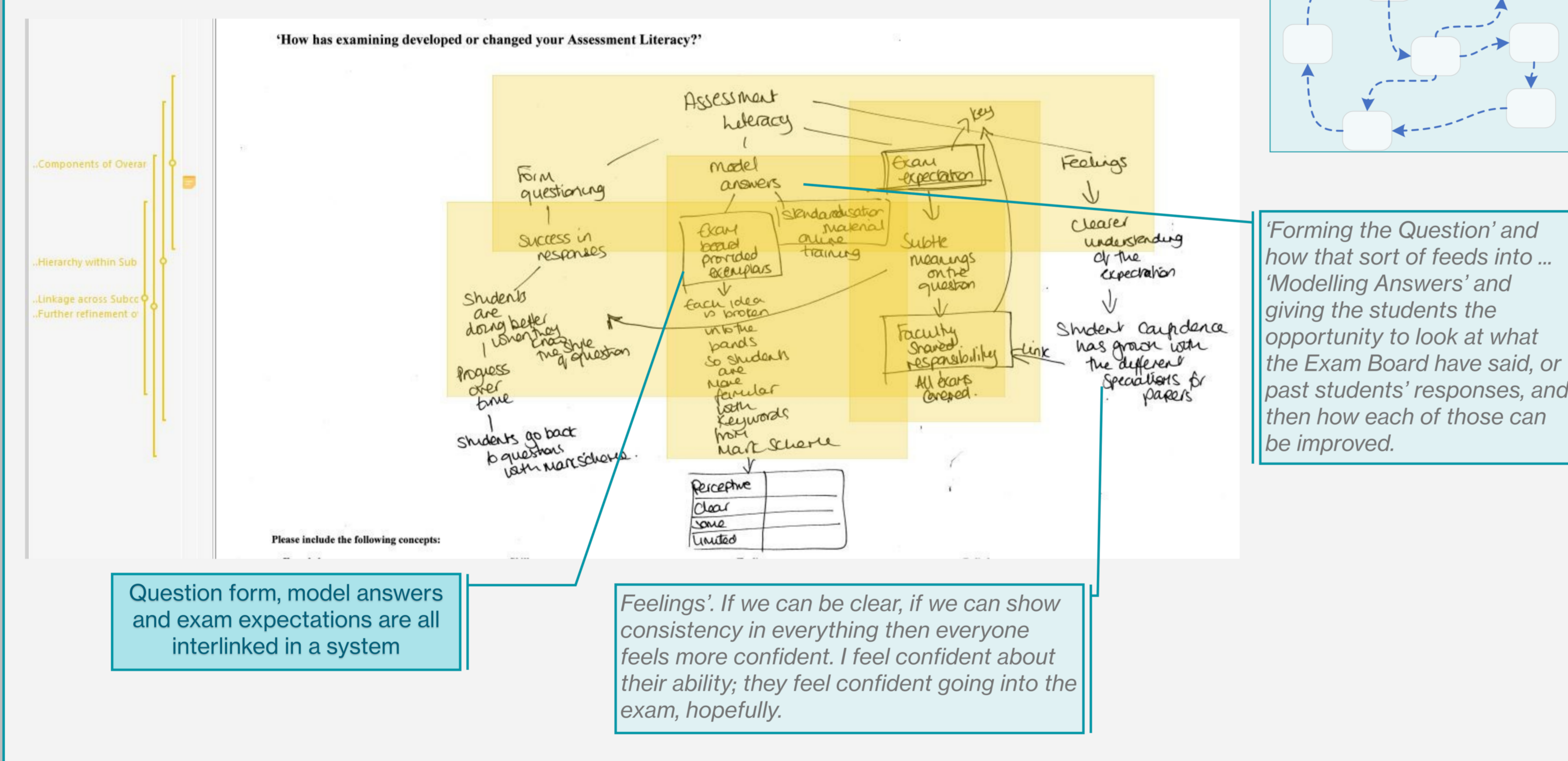
Spider Map: places the central theme or unifying factor in the centre



Arrows show the interrelation of concepts as well as their relative importance - e.g., mark schemes link to exam papers, command words, students' involvement

I think these are probably backwards and forwards. With the kids, we try and take the question apart a little bit, to avoid them just writing what they think as oppose to what the question is trying to get them to do.

System Map: shows a flow... may have inputs and outputs



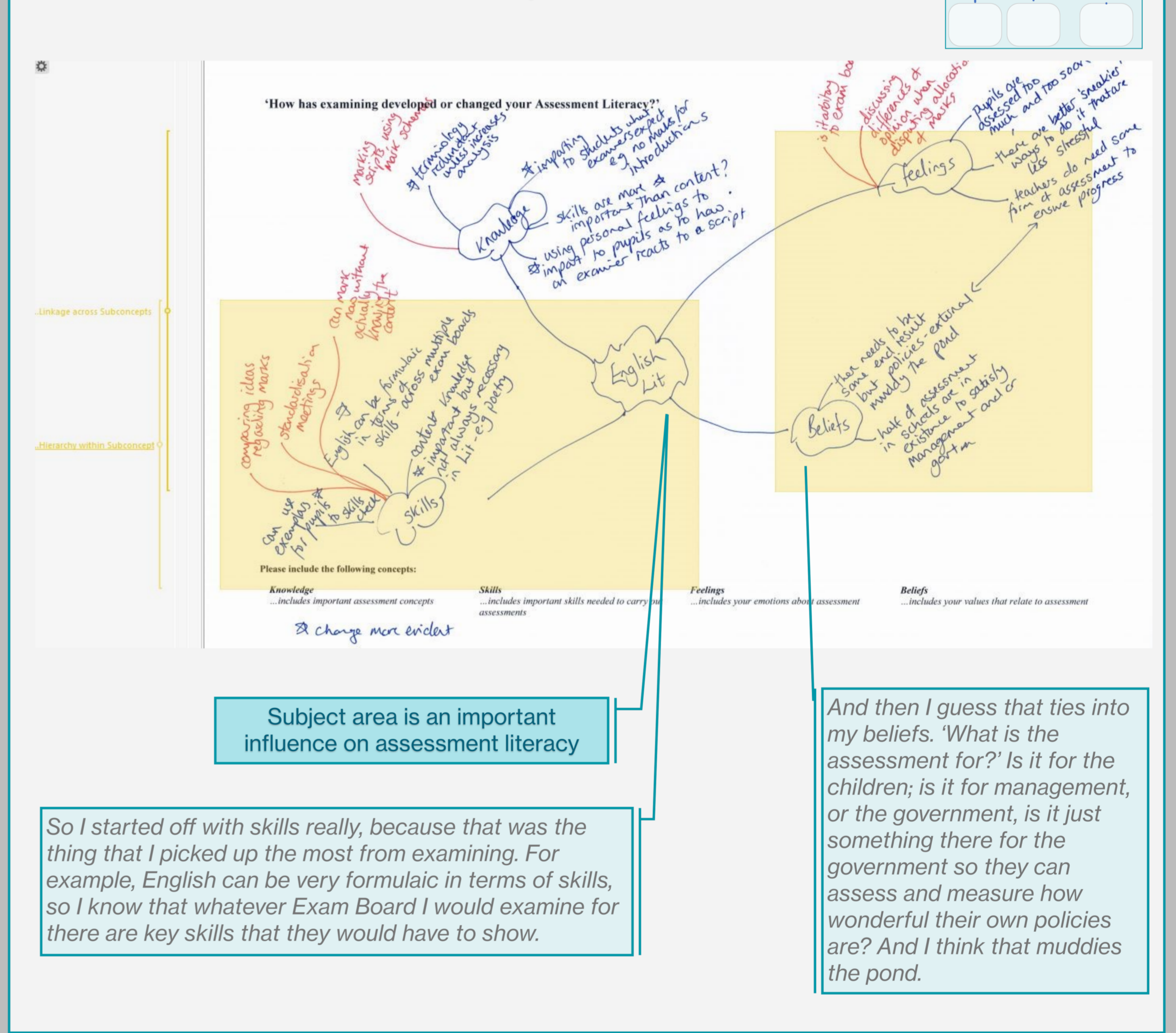
'Forming the Question' and how that sort of feeds into... 'Modelling Answers' and giving the students the opportunity to look at what the Exam Board have said, or past students' responses, and then how each of those can be improved.

Question form, model answers and exam expectations are all interlinked in a system

Feelings: If we can be clear, if we can show consistency in everything then everyone feels more confident. I feel confident about their ability; they feel confident going into the exam, hopefully.

ANALYSIS

Hierarchy/Chronology Map: presents information in order of importance



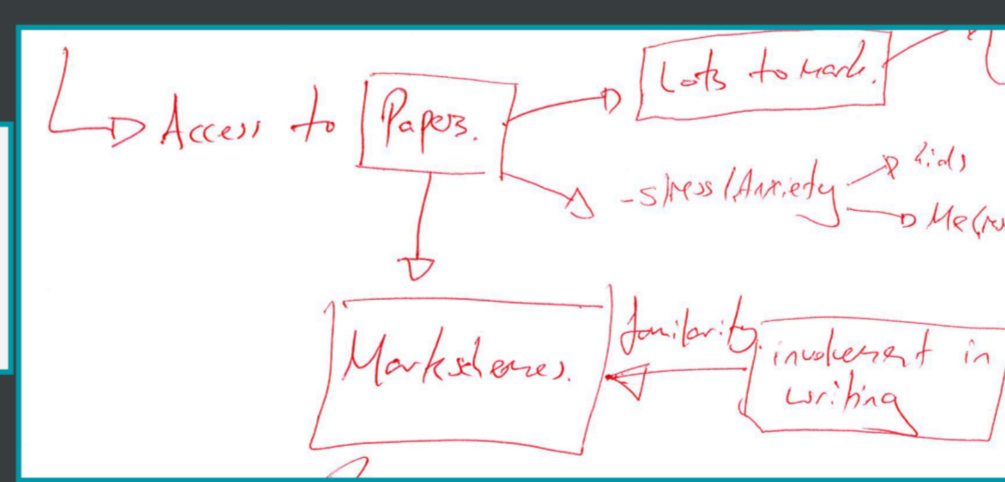
Subject area is an important influence on assessment literacy

So I started off with skills really, because that was the thing that I picked up the most from examining. For example, English can be very formulaic in terms of skills, so I know that whatever Exam Board I would examine for there are key skills that they would have to show.

And then I guess that ties into my beliefs. 'What is the assessment for?' is it for the children; is it for management, or the government, is it just something there for the government so they can assess and measure how wonderful their own policies are? And I think that muddies the pond.

DISCUSSION

Conceptual salience



They allow the participant to move from conceptual simplicity to conceptual complexity
...diagrams help participants to simplify complex ideas by reducing their cognitive load during the elicitation process

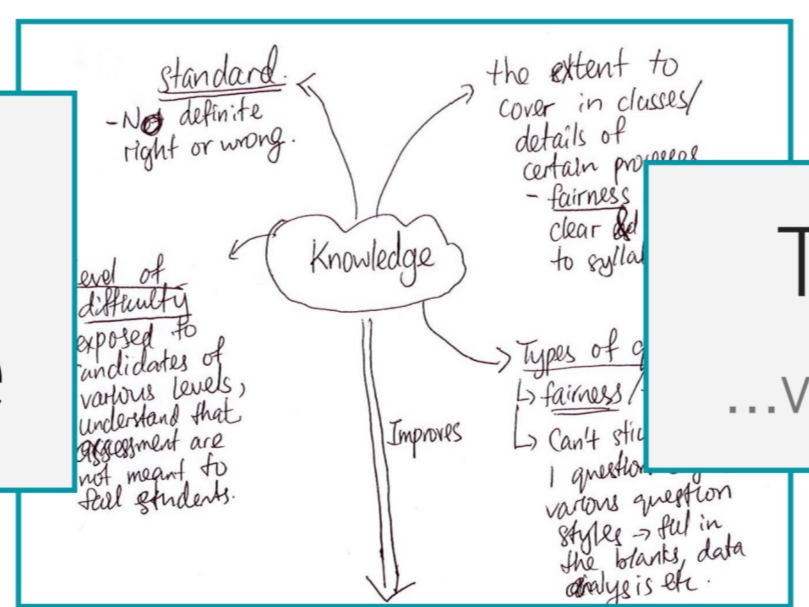
3 affordances of concept maps

Conceptual directionality/cause



They allow cohesive narrative construction
...its structural composition falls somewhere between the characteristics of linear, verbal language and the characteristics of open-ended visual representations

Subcomponents of assessment knowledge



They help the participant to maintain self-regulation and focus
...visually mediated encounters elevate the role of the participant to a position of expertise