Time	Summary	Teacher	Colleague	Researcher 1	Researcher 2
0:03:25- 0:06:50	Example: How would we work out how Dr B's car works? Take it apart. Where would we start dismantling? Sherry responds: Front - has engine in. T: But car needs petrol so somewhere else we should start from? P: Back. P: Fuel tank. T: What system would we use? P: Follow pipes. T: To? To engine, through to exhaust, to find out how car works. Today we'll take apart the leaf and see how it works: we will be leaf detectives looking for clues: 3 activities relating back to photosynthesis equation – how does plant get water, CO <sub>2</sub> , sunlight, what about chlorophyll, what does it do with sugar made, what happens to the oxygen? [ <i>Slide</i> <i>2:</i> cartoon of leaf detectives]	Analogy drawn between the way a car works and a leaf. I have deliberately chosen to talk about a notorious member of staff here to engage pupils' interest. Use of funnelling here to guide pupils to the notion of following through from the petrol tank. Emphasis shifted over to the pupils to 'be leaf detectives' to 'look for clues.' Challenge laid down for pupils to use their skill to find out how the process of photosynthesis is actually enacted.	Analogy model continued. Leads through analogy by questioning how does the car work (humour as car belongs to specific teacher keeps attention). Now today take apart the leaf to see how it works. Set the scene for lesson. Uses IWB to be more specific; draws attention to equation, minimises to create space for the leaf to be enlarged to form the focus. How does the leaf work? Look for clues. Cartoon focuses of task explained, poses questions	Authoritative interaction / funnelling to make concrete links with dismantling leaf (analogy / motivating), in order to introduce focus of today's lesson: scene setting/ priming. Outlines taskstsks: sharing objectives	Analogy; authoritative interaction; assistive questioning to help Ps think logically about investigating the system Revealing item 3 on screen visually links discussion back to lesson activity. Orientates within knowledge framework; indicates limitation of analogy by contrasting design complexity of car/leaf. Leaf detective slide gives limited info. Cartoon adds humour. (T gives more detail verbally). Direct link made between processes to be investigated and elements of equation.

*Figure 1.* Sample commentary grid (science)



Figure 2. T-MEDIA Across Subjects CD – Interactive theme map



Figure 3. Hitchhiker image as stimulus for group and class discussion

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Start by repeating something that somebody says to you that really irritates you and is part of the problem - perhaps a flashback to the past

'One more sick-note Mister and you're fired!'

Imagine someone has asked you a question about why you behave the way you do...repeat the question or start with the answer

'The most unusual thing I ever stole? A snowman.

Figure 5. 'Silent scaffolding' for poem writing in English



Figure 6. 'Interdependence': Cumulative annotation in history

#### Duration data for use of IWB (summed across six lessons)

The Interactive Whiteboard

most often to support whole

class teaching - from 82% of

where pupils were working on

On occasions, while pupils

worked individually the IWB display provided 'silent

scaffolding' (see Glossary), for

example in L8 where pupils

were writing their poems it was used in this mode for 28% of lesson time.

There was some whole class teaching without the IWB too. For example, in L3 this

accounted for 26% of lesson

time and included an episode

where pupils performed a short drama sketch.

was used in every lesson -

time in L6 to 22% in L7,

their collages.



# Duration data for use of IWB (data summed across six lessons)

Figure 7. English durations chart



#### Figure 8. History durations chart



### Figure 9. Mathematics durations chart

Duration data for use of IWB in Science (summed across 6 lessons)



## Figure 10. Science durations chart

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Figure 11. T-MEDIA Science CD – video screen



Figure 12. Across Subjects CD – Interactive map of IWB features used