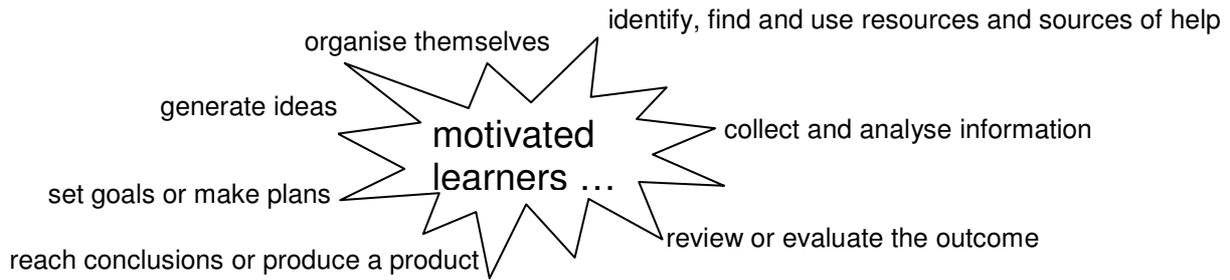


Leading in Learning



Why and how can lessons be improved?

content is the dominant theme in lessons, rather than skills and general learning



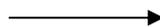
teach with a high level of challenge, demanding higher-order skills, problem solving, collaborative learning, critical & creative thinking

plenaries are rushed so pupils don't get to reflect on how and what they learned



improve plenaries to help pupils to develop the ability to think and talk about learning so that they are aware of what they have learned and how they learned it

pupils do not make connections between lessons & subjects, and lessons are in different groups with different teachers so there isn't necessarily a common learning experience



plan lessons collaboratively, watch others teach, be coached, have access to theoretical ideas

Thinking skills lessons focus deliberately on higher-order thinking (analysis, synthesis & evaluation)



Higher order thinking

- is not routine
- is complex
- yields multiple solutions
- involves nuanced judgements
- multiple criteria
- involves uncertainty
- self-regulation of thinking
- imposing meaning
- finding structure
- takes effort

NC 5 thinking skills

Information-processing skills (collect material, sort and classify, sequence, compare and contrast, analyse parts and wholes)

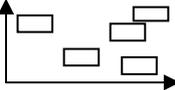
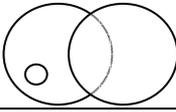
Reasoning skills (give reasons, make inferences and deductions, explain, make decisions)

Enquiry skills (ask questions, pose problems, plan what to do, predict outcomes, improve ideas)

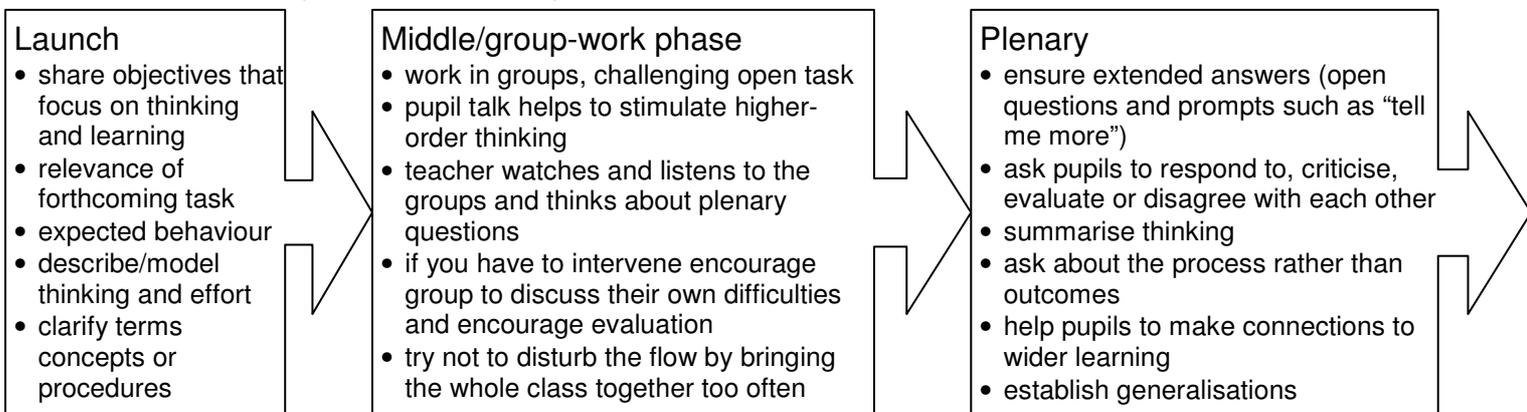
Creative thinking skills (generate & extend ideas, hypothesise, look for alternatives, apply imagination)

Evaluation skills (develop criteria, weigh information)

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<p>Top 10 thinking skills strategies for making links</p>		 <p>Advance organisers organisational frameworks that pupils use to prepare for what they are about to learn</p>
		
<p>Analogies help pupils understand an unfamiliar concept or process by comparing it with familiar objects or processes</p>	<p>Audience and purpose Enable pupils to consider audience and purpose (e.g. to entertain, inform, explain, persuade, practical, decorative)</p>	<p>Classifying Card or object sort leading to pupils establishing criteria for classification groups</p>
		
<p>Collective memory Pupils work in small teams to recreate a map, picture etc. Each team member in turn is sent to look for 10 secs and returns to group to create the item.</p>	<p>Living graphs and fortune lines Pupils position statements on a line graph and give reasons to justify their decisions. They can plot fortunes or emotions over time.</p>	<p>Mysteries Pupils are given 15-20 items of data about a situation. In groups they read, sort and link the statements to find a solution to the mystery question.</p>
		
<p>Reading images Provide pupils with a photo or other visual image with a white border. Ask them to annotate or label it to make links with what they already know. Pupils suggest a title for the image.</p>	<p>Relational diagrams Pupils use overlapping, separate or subsumed shapes to show whether all, some or none of the terms of a particular class belong to another class.</p>	<p>Summarising Encourage pupils to identify the main threads in the information and make connections between them, including inferences to fill in what is not stated and synthesising info for gist.</p>

The stages in a thinking skills lesson



Thinking words

- Do your pupils really understand these words?
- Which words are most important in your subject?

Analyse	Improvise	Synthesise	Identify	Organise and present	Listen with discrimination
Evaluate	Adapt	Speculate	Prioritise	Weigh viewpoints	Question critically
Select	Scan	Practise	Clarify	Explore ideas	Listen for gist
Classify	Skim	Check	Justify	Develop ideas	Apply rules & conventions
Collaborate	Summarise	Vary	Explain	Draw conclusions	Recognise limitations of accuracy
Deduce	Compare	Combine	Infer	Make decisions	Use logical argument
Experiment	Investigate	Rehearse	Refine	Narrow down	Make reasoned judgements

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