



# Barton Court Grammar School

## “A Thinking School”

In September 2012, Barton Court Grammar School started its journey towards becoming a “Thinking School”. The accreditation process took place in March 2015 with an outstanding outcome.

### So, what is a Thinking School?

*“A Thinking School is a school that puts the teaching of thinking at the heart of learning.”*

A Thinking School is:

**“A learning community in which all members share a common language; where thinking strategies and tools are used across the curriculum and teachers and students have sound understanding of metacognition; where all students are developing and demonstrating independent and cooperative learning skills; where the school generates high levels of achievement and an excitement and enthusiasm for learning” (TSI)**

The criteria for a Thinking School can be found at:

<http://socialsciences.exeter.ac.uk/education/research/centres/teachingthinkingdialogue/cedu/becomingathinkingschool/criteria/>

### Why becoming a Thinking School?

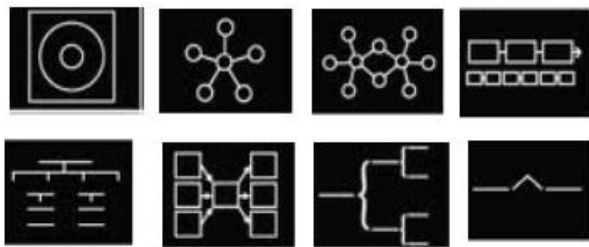
- “It is hard to achieve and therefore worth doing
- It has, at its heart, a complete focus on transforming learning rather than just teaching
- It has sustainability
- If successful it creates a common language of learning

- Students use thinking tools independently
- It has helped create an environment of “continuous improvement” and striving for the next challenge
- It breaks down geographical, political, cultural and financial disparities and barriers” (RGS)

### **Why are we using visual tools?**

- Visual tools offer students some structures through which they can be flexible, adaptable and open with their thinking and learning.

#### **a) Thinking Maps**



- Thinking Maps are a synthesis of the above. They provide a common language of visual tools.
- It's all about making connections, our brain makes connections every second so it is obvious that we do the same in the way we teach and learn.
- Predominantly we are visual processors so we need to provide our learners with highly structured displays for systematically managing and organising information.

At Barton Court we believe in "[The Mediation of Thinking](#)". It is about entering students' minds and dealing with misconceptions.

By using the 8 maps, we are offering 8 fundamental and universal cognitive thinking processes to our students which will enable them to, not only reflect on their own thinking, but also be fluent in explaining the mental processes they are using.







Students know already how to think but using the eight visual tools provides them with a clearer, more structured and common thinking model in order to contribute to their own thinking and to sharing their learning and thinking with others.

## b) Thinking Hats

In September 2012, we introduced the 8 “Thinking Maps” and the practical Thinking Tool: “**Six Thinking Hats**” during Tutor Time. The Thinking Hats provide a framework to help pupils think clearly and thoroughly in one direction at a time - white hat for facts, green hat for creativity, yellow hat for the benefits, black hat for the cautions/challenges, red hat for feelings, and the blue hat for process.

It's a simple mental metaphor. Hats are easy to put on and to take off. Each hat is a different colour which signals the thinking ingredient. In a group setting The Six Thinking Hats enable each pupils' unique point of view to be included and considered. Argument and endless discussion becomes a thing of the past. Thinking becomes more thorough (Six Thinking Hats: Strengthen Collaboration Skills, A Tool for Productive Critical and Creative Thinking, de Bono for Schools).

Each hat represents a different style of thinking:

	<b>White hat</b> Objective, neutral thinking in terms of facts, numbers and information. With this thinking hat, you focus on the data available.
	<b>Red hat</b> Emotional, with judgements, suspicions and intuitions. 'Wearing' the red hat, you look at problems using intuition, gut reaction and emotion.
	<b>Black hat</b> Negative, sees risks and thinks about why something will not function. Using this hat, look cautiously and defensively at all the bad points of the decision. Try to see why it might not work.
	<b>Yellow hat</b> Positive, optimistic, clear, effective and constructive. This hat helps you to think positively and to see all the benefits of the decision and the value in it.
	<b>Green hat</b> Creative, seeks alternatives. The green hat is where you can develop creative solutions to a problem. It is a freewheeling way of thinking, in which there is little criticism of ideas.
	<b>Blue hat</b> Or Meta hat, thinking about thinking. The blue thinker's role is to keep an overview of what thinking is necessary to scout the subject.

In order to try to explain our decision to become a Thinking School, the information below has been organised using the De Bono's 6 Hat Thinking Strategies. This Thinking Tool allows us to analyse and evaluate information from a variety of perspectives. The green and red hat thinking poses questions for you to consider.



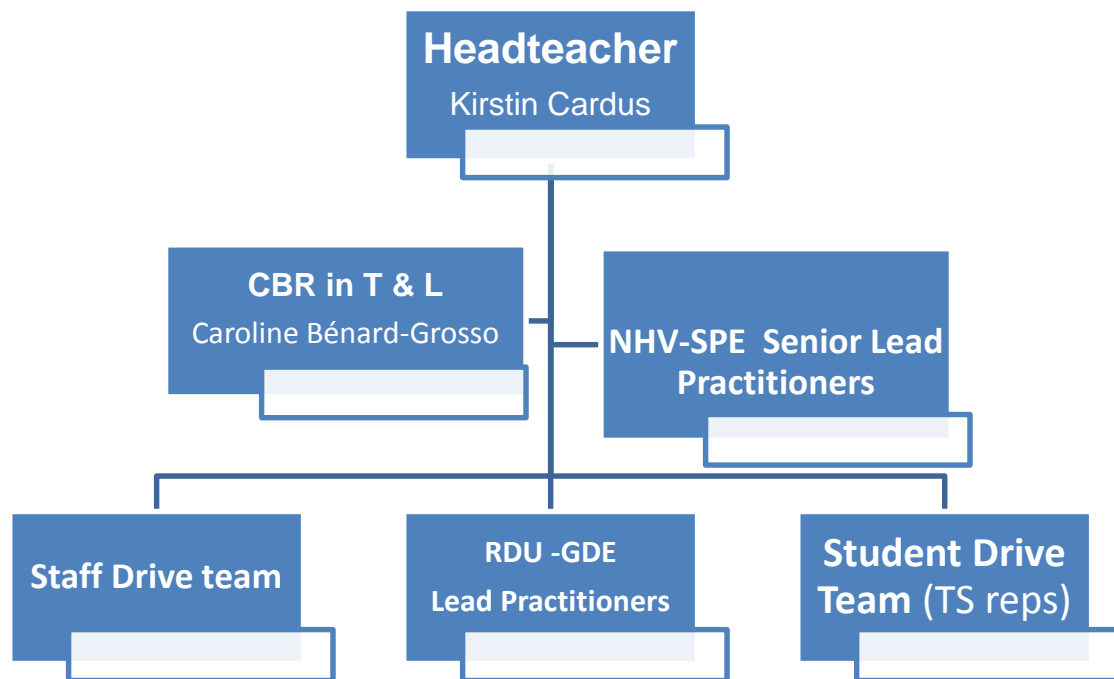
### **The White Hat (Facts and Statistics)**

We are committed to the development of cognitive education and we invest, time, energy and money into research, development and evaluation of a broad range of thinking tools and activities. We have a team of teachers who are committed to develop the Thinking School approach. We have a Thinking Map accredited trainer who has trained all staff on the use of the 8 Thinking Maps and we have Lead Practitioners working on the development of Thinking Hats, Habits of Mind and Thinkers Keys. Whole staff have been trained in the use of the 6 Hats. We are proud to say that we have embedded the 8 maps in our curriculum, pastoral and leadership programmes and are starting to do the same with the Hats. We have been attending the International Thinking School Conference for the last two years where we have been given the chance to work with TSI (Thinking Schools International) and Kestrel Education. This allows us to make connections with other schools and to work with external consultants providing excellent CPD.



### **The Blue Hat (Organisational Aspects)**

The idea of a Thinking School must transcend the entire organisation from the Headteacher and Governors, Senior/Middle Leaders, teachers, support staff and students. The Thinking agenda is largely driven by the Specialist Leader of Education (Miss Benard-Grosso) together with the Lead Practitioner Team and Staff Drive Team driven by the Headteacher and the Assistant Headteacher responsible for Teaching and Learning. We also have a team of motivated and committed Thinking School Representatives who are part of our Student Drive Team. All these individuals have a real passion for developing cognitive education within the School. The tree map below helps visualise this structure. BCGS is committed to the long term provision and development of thinking.



All members of staff are expected to help with the implementation, development and assessment of thinking strategies. This applies to Form Tutors, Curriculum Leaders, the Senior Leadership Team, teaching staff and administrative staff. The commitment to cognitive education and ways of thinking are part of performance management for ALL staff.



### **The Yellow Hat (All the great things!)**

So what has happened as a result of introducing these strategies and ideas?

- Work has become more visual, structured, concise and more personalised
- There are more transferrable skills between curriculum areas
- There is a clear school vision
- Increased dialogue between curriculum areas and teaching staff
- Clarity of CPD and performance management
- Student understanding of different thought processes
- Lessons are more varied and more interactive
- Students and staff are becoming even more reflective
- Higher level questioning has become natural
- Students are beginning to take more ownership and responsibility for their work
- Our message is spreading to other secondary schools, partnership schools and feeder schools
- Students are moving from **what** they know to **how** they know
- Students are becoming more fluent in how to explain their own thinking
- A pastoral programme that is meaningful and reflective



### **The Black Hat ( The Challenges and Barriers/ Problems)**

- Implementing new ideas to begin with seems forced, disingenuous and ironically leads to a lack of originality in lessons
- How to train whole staff and students? Through enrichment day?
- Maps can be used as a graphic support and not as a thinking process.
- Once a new strategy is embedded along comes another! When do we stop and how do we sustain what we have?
- Training new staff ( incl. NQTs, PGCEs)
- New students - how do we induct them without increasing work for ourselves?
- How to ensure consistency?
- How to engage everyone without creating confusion/ irritation and lack of independence
- Performance management – encourage teachers even if they do not agree with the principle of cognitive education. The issue of the tick box approach?
- Sustainability – staff turnover?



### **The Red Hat (Emotional Response)**

- As a potential teacher/ leader, how do you feel about our thinking skills approach?
- Ask yourself how well you would fit in. Does the thought of this inspire you or the opposite?
- How do you feel about delivering this in the classroom/ curriculum/ pastoral?
- What is your immediate reaction? Your “gut feeling”?



### **The Green Hat (Creativity/Solutions)**

- Take a look at the Black Hat again. What ideas could you bring to knock down some of these brick walls?
- What experience have you had with similar problems? How did you solve or approach these?
- Have you used any thinking strategies in your previous jobs? Were they successful? What can we learn from your experience
- What can you offer to BCGS as a thinking school?





#### **c) Attributes for Success**

In September 2013, we will introduce the 16 “Habits of mind” .The Habits of mind are 16 characteristics found in self-directed independent, successful learners to help them decide how to cope with choices they may face on their learning journey. They proved a framework or compass for students to refer to when directing their own learning. Over time these characteristics become habit.

These habits allow the students to become flexible, continuous learnings that are able to behave intelligently when encountering problems, using information efficiently, thinking critically about its source and content.

"Attributes for success (Habits of mind, Prof Art Costa) are the characteristics of what intelligent people do when they are confronted with problems, the resolutions of which are not immediately apparent."

#### **The Sixteen Attributes for Success:**

Habit		Habit	
	Thinking and communicating with clarity and precision		Thinking about thinking (metacognition)
	Taking responsible risks		Responding with wonderment and awe

	Creating, imagining and innovating		Questioning and posing problems
	Managing impulsivity		Finding humour
	Applying past knowledge to new situations		Thinking interdependently
	Listening with understanding and empathy		Thinking flexibly
	Gathering data through all senses		Persisting
	Remaining open to continuous learning		Striving for accuracy and precision

#### d) **THINKER'S KEYS**

Strategy used to develop critical and creative thinking. The Thinker's Keys are represented by twenty key questions that require the person to think of their own unique answer or response.

#### **But what critical and creative thinking is?**

It is a set of skills and attitudes that are deployed selectively to evaluate arguments (reasons and their companion conclusions) according to explicit standards of rationality.



## Why using thinker's keys?

The majority of the Keys place emphasis upon the development of innovative and creative thinking:

1. Creative thinking can be exciting and enjoyable. This active participation can then create a positive attitude towards the learning process.
2. The stimulation of creativity in learning heightens the emotional link with that learning. This emotional involvement boosts the effectiveness of our memory systems.
3. Developing our creative potential will strengthen our ability to cope with change. If there is one thing that we can guarantee into the 21st century, it will be the exponential rate of change that will affect the world. When our thinking is open-ended and accepting of new ideas, we become much more capable of adapting to these changing circumstances.

## Explanation of the Thinker's Keys

### 1. The REVERSE

Place words such as cannot, never and not in sentences which are commonly displayed in a listing format.

#### THE JUSTIFICATION:

Students are too often required to regurgitate endless lists of facts. Moving in the opposite direction still requires a sound knowledge base, but it forces students to think.

#### THE EXAMPLE:

Name 10 things that you could not clean.  
List 5 sounds that you have never heard.  
Name 10 things that you could not photograph.

### 2. The WHAT IF

You can ask virtually any What If question. They can be either serious or frivolous. One excellent means of displaying ideas from this key is to draw up an Ideas Wheel.

#### THE JUSTIFICATION:

Great for introducing an area of study, and for tapping into the students' knowledge base. It also generates loads of innovative ideas.

#### THE EXAMPLE:

1. What if the price of petrol was immediately doubled?
2. What if all cars turned into skateboards?

### 3. The DISADVANTAGES



Choose an object, eg an umbrella, or a practice, eg playground duty, and list a number of its disadvantages. Then list some ways of correcting, or eliminating these disadvantages.

#### THE JUSTIFICATION:

We often accept the inadequacies of many products, without really considering how they can be improved. Practise this key and you will be amazed at the number of everyday products which can be further developed.

#### THE EXAMPLE:

An Umbrella:

The Disadvantages	The Improvements
The sharp sections can poke you in the eye.	Glue flat erasers onto the end of each one.
They take up too much room, even when folded.	Develop a series of locking hinges along the length of the umbrella.
Water drips onto your shoes.	Attach an overhanging plastic sheet to the edges of the umbrella.

### 4. The COMBINATION



List the attributes of 2 dissimilar objects (one within your area of study, one outside), then combine the attributes into a single object.

#### THE JUSTIFICATION:

Many important inventions, such as the disposable razor (the concept of loading bullets into a rifle, combined with a normal razor) and the first printing press (the wine press and the coin punch) were created in this way.

#### THE EXAMPLE:

A leaf and a mousetrap.

The Leaf	The Mousetrap
They change colours through the year.	They are made of wood and wire
Insects often eat them.	They can kill mice.
There are millions of them.	They can be left in lots of places.

### THE COMBINATIONS:

1. A miniature mousetrap for placing on leaves, that can kill insects when they try to eat the leaf.
2. Mousetraps that can change colour and blend in with the surface on which they are placed.

## 5. The B A R

The following acronym, or ladder of words, can be used by different age groups (ranging from Yr 1 to adults) to reinvent or redesign everyday objects.

### THE JUSTIFICATION:

A practical step-by-step strategy for developing innovative and highly unusual products. This type of strategy is often used in today's hightech product development laboratories to create new products for the market.

The Ladder is:

**B**igger  
**A**dd  
**R**eplace

### THE EXAMPLE:

**B A R** a skateboard. Ask the students to draw a standard skateboard, and then direct them through the steps one at a time. Here's one series of possibilities:



- B igger**    Extend the rear of the skateboard, making it much bigger, and put some shelves on it for storage space. Place a counterweight on the front to balance it out.
- A dd**       Add a small rocket motor, which can be controlled with a foot throttle near the back of the skateboard.
- R eplace**   Replace the wheels with a small hovercraft unit, which is controlled by a hand-held rotating device.

It is very important that **SILLY** and **INNOVATIVE** ideas are encouraged. Very few new ideas emerge from predictable and tedious efforts.

## 6. The ALPHABET



Choose an object or general category of objects which features in the area of study and compile a list of words from A to Z which have some relevance to the object/s. Then try to expand on some ideas which link with each of the words.

### THE JUSTIFICATION:

Using the alphabetical format clarifies students' thinking. It is a sorting process which is made easier by considering one aspect at a time.

### THE EXAMPLE:

**Sport** (specifically tennis)

- A. Antbed courts - does this mean that ants can play tennis while in bed?; perhaps a miniature game of tennis could be devised as a board game, with each of the players being activated by remote control.
- B. Bouncing - could tennis racquets be constructed of a special rubber so that they could bounce as well?; this feature could be included in a new version of tennis. Perhaps the rules would require each player to bounce the racquet after every shot is played.

Then continue with C through to Z. If the students draw a blank with a particular letter, simply move on, and return to that letter at a later stage.

In a more simplified version, merely list single objects from A to Z, e.g. Foods:

A - artichoke  
B - beetroot  
etc.

## 7. The VARIATIONS



This key employs a special group of words. Start each question with "How many ways can you ..."

### THE JUSTIFICATION:

Another one for expanding your thinking. Some very practical ideas often result from usage of this key.

### THE EXAMPLE:

How many ways can you: paint a house  
wash an elephant  
make new friends  
turn a TV on

## 8. The PICTURE



The teacher draws a simple diagram which has no relevance to the area of study and the students then try to work out ways in which it could be linked with that area. As an interesting imaginative writing exercise, ask the students to compile a list of 10 things that the diagram could represent.

### THE JUSTIFICATION:

Research strongly indicates that the development of visualization capacities will enhance learning in virtually **all** fields of study.

### THE EXAMPLE:

Outer Space:

Figure 2



an overloaded UFO carrying Christmas trees  
a space monster breaking out of its shell

## 9. The PREDICTION



Ask for a series of predictions in regard to a particular situation, product or set of circumstances.

### THE JUSTIFICATION:

Attempting to predict the future is not the timewaster that some would lead us to believe. The journey is always easier if you know where you are going.

### THE EXAMPLE:

1. Predict how schools will operate in 100 years.
2. Predict 5 present day household appliances which will be obsolete in 20 years time.
3. Predict the power source of the family car by the year 2020.

#### For Example N°3:

- a. combination electric/petrol/nuclear fission, with the driver determining the choice before the start of the journey.
- b. superstrength rubber bands which are wound up with a vintage car crank mechanism.
- c. satellite electromagnetic directional devices, drawing a car along a course which has been predetermined by the vehicle's onboard computer.

## 10. The DIFFERENT USES

Put your imagination to work and list some widely different uses for a chosen object from your area of study.

### THE JUSTIFICATION:

The concept of recycling is an important one here. This key is worth applying to many of our everyday (and often disposable) products.

### THE EXAMPLE:

Find 10 uses for red plastic noses.

1. Place them in your strawberry patch to give a false impression of the number of strawberries.
2. Use them as face masks for mice when they undertake a cheese factory robbery.

## 11. The RIDICULOUS

Make a ridiculous statement that would be virtually impossible to implement, and then attempt to actually substantiate it.

### THE JUSTIFICATION:

The expressions 'It's not possible' and 'That's ridiculous' often prevent the development of many excellent ideas. Learn to break through them.

### THE EXAMPLE:

"The government should buy a brand new car for every taxpayer."

**Some consequences:**

1. This would provide an incredible boost for the local car industry.
2. With so many more people being employed, unemployment benefits would not need to be paid by the taxpayer.
3. More money earned from wages would be injected into the economy and would boost a wide variety of businesses.
4. Less accidents would be caused by unroadworthy cars, with a subsequent lowering of costs associated with accidents.
5. Cars would be more fuel-efficient because of their modern design, leading to a reduction in air pollution and less wastage of petrol.

## 12. The COMMONALITY

Decide upon 2 objects which would generally have nothing in common, and try to outline some points of commonality between them.

### THE JUSTIFICATION:

Another mindstretcher. Great for creative ideas as well as the development of unusual concepts.

### THE EXAMPLE:

Ayer's Rock and the Pacific Ocean:

They both change colour through the day.  
They both have a rough surface.  
They are both tourist attractions.  
You can't drive cars on either of them.  
When the Flat Earth theory was in vogue, you  
could have fallen off both of them.

## 13. The QUESTION

Start with the answer, and try to list 5 questions which could be linked with that answer only.

### THE JUSTIFICATION:

An excellent break from the pattern of the teacher asking all of the questions. Students still need to demonstrate a solid knowledge base.

### THE EXAMPLE:

The answer is MIDNIGHT.

1. When is it 12 hours after midday?
2. When did Cinderella's coach turn into a pumpkin?
3. What word is spelt M-I-D-N-I-G-H-T?



## 14. The BRAINSTORMING

State a problem which needs to be solved and brainstorm a list of solutions. Start the brainstorm statement with the words 'How to ....'.

### THE JUSTIFICATION:

Great for solutions to everyday problems. Make sure that the freedom offered within the rules is available to all participants.

### THE RULES OF BRAINSTORMING:

1. Think of as many ideas as you can; don't hesitate and consider the implications; simply write them down.
2. Unusual or silly ideas are acceptable.
3. 'Tagging' onto other people's ideas is encouraged.
4. No criticism of any ideas is allowed.

### The Example:

How to encourage people not to drive their cars to work.

#### Some possible solutions:

1. Offer monetary incentives to drivers with 3 or more passengers.
2. Introduce a wide range of work-at-home schemes.
3. Revert to pedal cars so that driving requires a much harder effort.
4. Provide a financial incentive for driving less often, by basing the annual registration fee on the number of kilometres driven rather than the present standard fee for all vehicles.
5. Triple the price of petrol to provide further discouragement and direct the extra taxes towards the design of top quality public transport systems.
6. Place wooden seats in cars.

## 15. The INVENTIONS

Encourage students to develop inventions which are constructed in an unusual manner. The first step would be to outline the product on paper, which would then lead into possible construction.

### THE JUSTIFICATION:

Kids (and grownups too) love to invent things if given the opportunity. Tragically, the opportunities in today's society seem to be growing fewer and fewer.

### THE EXAMPLE:

Invent some or all of the following

1. An eggshell peeler.
2. A combination knife and fork.
3. Devices which would - catch mosquitoes  
make your bed  
do the ironing  
comb your hair  
wake you up in the morning



## 16. The BRICK WALL

Make a statement which could not generally be questioned or disputed, and then try to break down the wall by outlining other ways of dealing with the situation.

### THE JUSTIFICATION:

We often give in too quickly when we question many of the world's present situations. Practise the development of alternative strategies.

### THE EXAMPLE:

Governments need to collect taxes in order to provide necessary services.

#### Some Alternatives:

1. Every government employee, without exception, could become an individual contractor and be paid directly for a service as a customer requires it.
2. People could pay for government services by bartering their own skills for a set number of hours each week rather than paying with their taxes.
3. Every working person could be rostered to work in a government department for one day each week.
4. Break the entire nation into community groups of 500 people with each group being responsible for provision of their own services.

## 17. The CONSTRUCTION

Set up a wide variety of construction problem-solving tasks and use lots of readily available materials.

### THE JUSTIFICATION:

Here's an example of really practical creative thinking. It goes hand in hand with outright fun. Try to encourage the development of the 'See/Plan/Do/Check' problem-solving strategy.

### THE EXAMPLE:

1. Build the highest possible self-supporting structure.  
**Materials:** 10 straws and 4 rubber bands.
2. Build a platform which will suspend a house brick as high as possible in the air.  
**Materials:** One house brick, 10 straws and some sticky tape.
3. Build the 'Story Bridge' - a book placed as high as possible on a straw platform.  
**Materials:** a book, 10 straws and some sticky tape.
4. Propel a balloon as far as possible through the air.  
**Materials:** One balloon, one straw, some sticky tape, a ball of string and a pair of scissors.
5. Build the highest possible self-supporting structure.  
**Materials:** One sheet of newspaper, some sticky tape and a pair of scissors.
6. Place a rubber band as far from the edge of a desk as possible.  
**Materials:** 10 iceblock sticks and 6 rubber bands.
7. Balance a marble as high in the air as possible.  
**Materials:** One marble, 20 straws and one paper clip.

## 18. The FORCED RELATIONSHIPS

Develop a solution to a problem by employing a number of dissimilar objects.

- |                 |   |               |
|-----------------|---|---------------|
| For Years 1/2   | - | one object    |
| For Years 3/4   | - | two objects   |
| For Years 5/6/7 | - | three objects |
| For Years 8-12  | - | four objects  |

### THE JUSTIFICATION:

The dimensions of problem-solving are expanded dramatically with this key. Never underestimate the importance of constantly developing alternative strategies.

### THE EXAMPLE:

#### A Problem :

You need to retrieve your kite from a very tall tree by using: a packet of Minties  
a hairbrush  
a comic

#### A Solution:

Melt the Minties and stick them on your hands and feet to give extra grip when climbing. When you are near the kite, throw the hairbrush to dislodge it and make it fall. Then stick the comic pages together with the Minties and construct a parachute for getting down to the ground.

## 19. The ALTERNATIVE

List ways in which to complete a task without using the normal tools or implements.

### THE JUSTIFICATION:

Necessity is the mother of invention. Take away the normal tool and spark some innovative solutions.

### THE EXAMPLE:

- |                    |   |  |
|--------------------|---|--|
| Work out 3 ways to | - | clean your teeth <u>without a toothbrush</u> |
|                    |   | cook toast <u>without a toaster</u>          |
|                    |   | paint a chair <u>without a paintbrush</u>    |
|                    |   | mow the lawn <u>without a mower</u>          |

## 20. The INTERPRETATION



Describe an unusual situation and then think of some different explanations for the existence of that situation.

### THE JUSTIFICATION:

Another innovative thinking exercise. Develops the ability to consider a wide range of consequences.

### THE EXAMPLE:

Your neighbour is making large circles in his backyard by pouring sump oil from a can.

#### Some Explanations:

1. He is a disguised alien and is sending cryptic messages to his friends in outer space.
2. He considers himself to be another Pro Hart, and he will soon be rolling around in the grass, attempting to create an environmental masterpiece.
3. He has had a fixation for circles since his childhood, and later will be seen dancing around the circles in the light of the full moon.

## CoRT Thinking Lessons

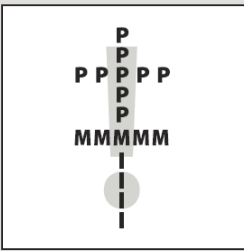

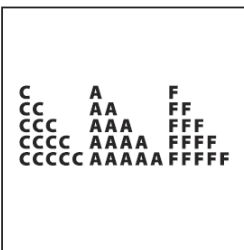

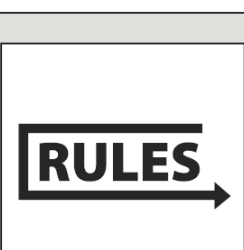
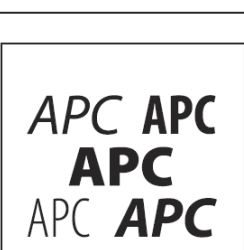
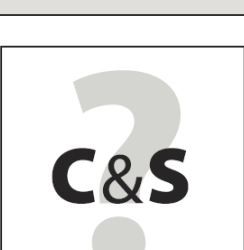
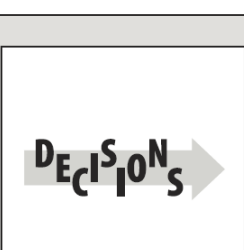

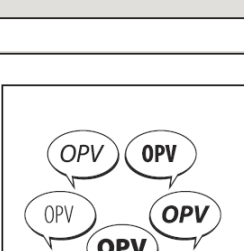
### *Breadth Thinking Tools*

CoRT Thinking Lessons have been taught in schools since the mid 1970s. They have since become the

most widely used school materials for the direct teaching of thinking as a basic skill worldwide.

All of this experience has contributed to developing CoRT Thinking Lessons that:

1. Are practical and hands-on in nature.
2. Can be taught as a separate subject—thinking skills—or embedded in existing curriculum to strengthen student learning and develop independent thinkers.
3. Are focused on equipping students to become effective, open-minded thinkers—critical, creative, constructive, and comprehensive.
4. Address the increasing interest and recognition for the need to teach thinking as a basic skill along with reading, writing, and mathematics; the traditional basics.
5. Can be used in a wide variety of situations from schools in disadvantaged areas to elite schools to students being home schooled.
6. Appeal to a wide range of ages (6-adult) and abilities (IQs of 75-140).

	<p><b>PMI:</b>  <b>Plus • Minus</b>  <b>Interesting</b>  The Treatment  of Ideas</p>		<p><b>Planning</b>  Thinking Ahead to  Get Things Done</p>
	<p><b>CAF:</b>  <b>Consider All Factors</b>  The Prime  Information  Input Tool</p>		<p><b>FIP:</b>  <b>First Important</b>  <b>Priorities</b>  What Must be Done First?  What's Most Important?</p>
	<p><b>Rules</b>  Make Life  Easier and  Better</p>		<p><b>APC:</b>  <b>Alternatives</b>  <b>Possibilities • Choices</b>  The Tool for Creativity</p>
	<p><b>C&amp;S:</b>  <b>Consequence</b>  <b>&amp; Sequel</b>  A Prediction and  Evaluation Tool</p>		<p><b>Decisions</b>  Think Clearly  and Thoroughly</p>
	<p><b>AGO:</b>  <b>Aims • Goals</b>  <b>Objectives</b>  What Is the  Purpose?</p>		<p><b>OPV:</b>  <b>Other People's Views</b>  An Exploration Tool to  Broaden Perception</p>

Think of a person setting out to learn to be a carpenter. Each carpenter's tool is designed to carry out a specific function. The carpenter learns when and how to use each of the tools one-by-one. A lot of practice is required to become a skilled carpenter. Learning to become a skilled thinker is the same approach: to make the basic operations of thinking second nature so that they are carried out automatically, smoothly, and without fuss or effort.

### **P4C – is short for Philosophy for Children.**

Children are taught how to create their own philosophical questions. They then choose one question that is the focus of a philosophical enquiry, or dialogue. For example the question might be 'is it ever ok to steal?'

The teacher, as facilitator, supports the children in their thinking, reasoning and questioning, as well as the way the children speak and listen to each other in the dialogue. After the enquiry the children and facilitator reflect on the quality of the thinking, reasoning and participation, and suggest how they could improve; either as individuals or as a group (community).

P4C is intended to be a regular activity so that the children develop their skills and understanding over time. The role of the facilitator is crucial to ensuring quality dialogue and progress, as well as integration with the curriculum.

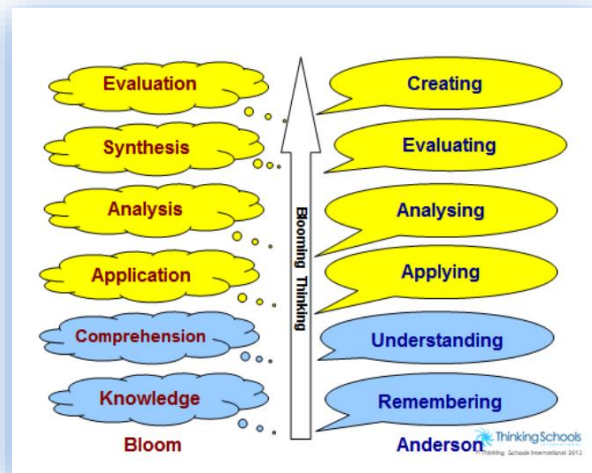
It is well documented that P4C has an impact on children's cognitive, social and emotional development. P4C is about getting children to think and communicate well; to think better for themselves.

P4C is a thorough pedagogy with considerable academic pedigree. Professor Matthew Lipman, frustrated by his students' lack of engagement with learning and thinking, was influenced by educationalists and philosophers such as Vygotsky, Piaget, Dewey as well as the tradition of Socratic dialogue.

**"If we expect pupils to engage in more creative and stimulating thought process, we, as teachers must encourage them by asking higher level questions."**

### **Linking higher order Questioning with higher order Thinking.**

- Developed initially in 1950's by Benjamin Bloom, readapted and significantly improved by Lorin Anderson in 1990's.
- Hierarchy of 6 developmental stages of thinking which become increasingly complex and demanding.
- The levels of thinking can be applied to developing questioning across all levels of schooling and in areas of learning.



Ask better questions...

QUESTION MATRIX	IS? DOES? PRESENT	HAS? DID? WAS? PAST	CAN? POSSIBILITY	SHOULD? OPINION	WOULD? COULD? PROBABILITY	WILL? PREDICTION	MIGHT? IMAGINATION
WHAT? EVENT							
WHERE? PLACE							
WHEN? TIME							
WHICH? CHOICE							
WHO? PERSON							
WHY? REASON							
HOW? MEANING							

The general level of difficulty of question increases... A "What is?" question is normally easier to create and answer than a "How might?" question.

Deeper questioning and anticipated deeper response is developed from top left to bottom right.

Get pupils to come up with their own questions by choosing a word from the left-most column followed by a word from the top row.

Eg.

What Is... the time / the name of... etc

When Will... the reaction stop if I use X grams of Y?

How Might... we use photosynthesis to overcome the impact of burning fossil fuels?

### **Further Information/ Useful links**

<https://gateway.bartoncourt.org/staff/teachinglearning/SitePages/Home.aspx>

<http://www.thinkingmaps.com/>

<http://www.thinkingfoundation.org/>

<http://www.edwdebono.com/>

<http://www.thinkerskeys.com/>

<http://thinkerskeys.wikispaces.com/Classroom+Ideas>

<http://www.instituteforhabitsofmind.com/>

<http://www.thinkingschool.co.uk>

<http://www.habitsofmind.co.uk/index.html>

<http://p4c.com/>