thinkers
KEYS
CARDS

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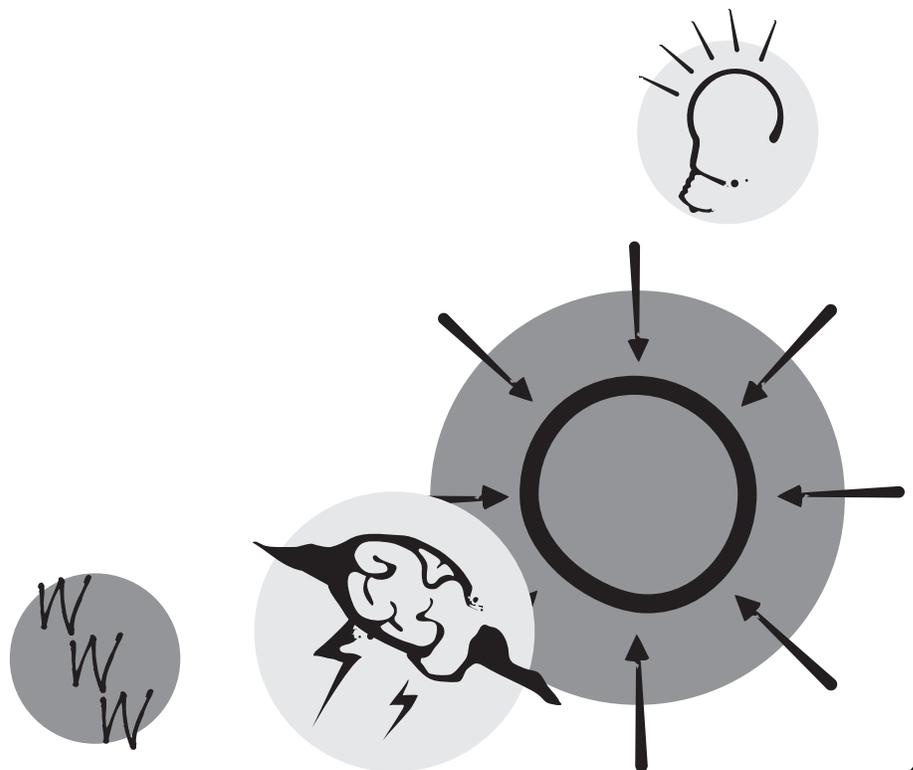
OVERVIEW

Welcome to an exciting framework for the teaching of thinking. The Thinkers Keys are twenty powerful strategies for generating Zest Practice intellectual rigour, and thus, advancing everyday learning in all settings.

Zest Practice? It's a slightly illogical combination of Best Practice and Zen. 'Best' is all very well, yet it doesn't always stimulate the senses. If you want to inspire the truly extraordinary in yourself and others, then go for Zest. Inspiring thinking needs the spice of Zest.... and the inner peace of Zen.

The Thinkers Keys Cards focus on Zest Practice, and by association, Zest Thinking. The Cards have been placed into two general groups:

- Critical / Organisational (the purple ones). When you need to get yourself organised, these are the cards for you. They encourage you to do your research, to evaluate your information, and to place any necessary tasks into action.

- Creative (the Orange ones). When you want to generate all-new ideas, or to develop some different perspectives on an issue, then these Cards will help you to do so. They challenge you to think very differently.

Many learning processes will require a combination of Purple and Orange thinking. If you find yourself drifting to one colour more than the other, you have possibly unbalanced your thinking processes. Constantly challenge yourself to use both colours.

Thinking Sequences are the key to using these Cards effectively. While it's all very well to understand how to use individual strategies, quality thinking is more likely to be generated by using relevant strategies that are in sequence and in context. Cruise through the section on Sequences for more ideas.

The Thinking Organiser in the middle of this booklet is used by students to visually sort out their learning sequences. Experiment with its use. While I can offer some options (and I have), the best applications come from your own trials and reflections.

PERSPECTIVES ON THINKING

Thinking is not an optional extra in learning. Some people seem to consider thinking as a luxury bonus, ie something that they will 'cover' after they've managed to teach everything else they need to do. Wrong approach.

Thinking is a core skill. Thinking will augment the quality of all learning. A student's thinking will determine his/her deep residual embedding of the learning that is taking place. Given that this embedding is one of the critical drivers for quality learning, we can hardly refer to thinking as a luxury. It's a necessity.

You're always thinking. If you're not, then you must be dead. The critical issue is the quality of thinking that is taking place at any one time. And that's why these Thinkers Keys have been developed – to boost thinking in everyday learning at all times.

Thinking can be explicitly taught. Don't expect it to occur via osmosis. It doesn't just magically occur overnight. These Thinkers Keys will still require direct instruction. What matters, though, is that the instruction occurs in the context of the learning.

If you're serious about transfer into real life contexts, then contextually embed these Thinkers Keys into experiences that are based upon deep inquiry learning tasks.
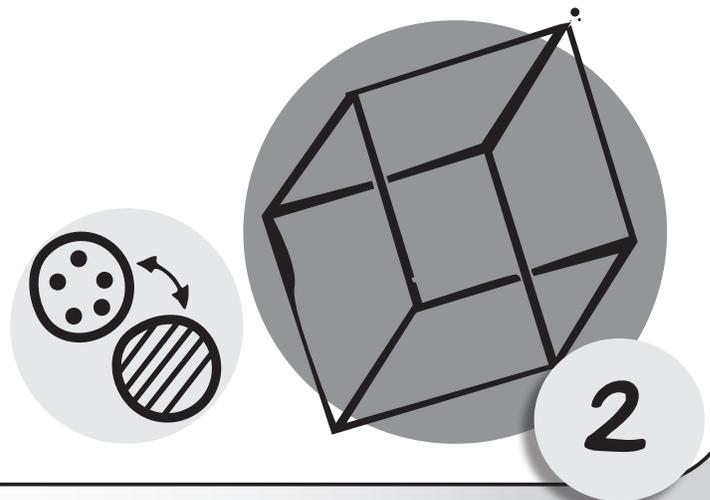
GETTING STARTED

There are lots of options for introducing the Thinkers Keys. I'll outline some steps below. However, I ask only one thing: Please do not introduce them out of context. Some teachers teach them as an optional extra, and use the Keys as a time fill-in just before a lunch break. While it may be entertaining for that short session, it's missing the point on constructivist learning.

A steady long-term process could use this sequence:

• Introduce the Keys one at a time, and in direct context with the lesson at that time. For example, if you were introducing the Consequences Key, it may simply be a part of a discussion on the consequences of different choices that someone makes when they're online.

• Once you have introduced several of the Keys, focus on the use of sequences. The first sequence (although the one you choose is entirely up to you) could be Enhancement (Purpose, Improvements, Action, Reflection). This might be used in a study of Machines, although I've heard of an English teacher who used this sequence in a Fan Fiction writing assignment (in which you rewrite part of your favourite novel).

• The development and application of different sequences is the core process for the use of these Thinkers Keys. Steadily design new sequences, and encourage students to clarify which sequence is the best fit for a specific learning task.

A further option: Some teachers actually introduce the Thinkers Keys, one full sequence at a time. This then places the focus on the application of the sequences, rather than just the individual Keys, in all future learning.

PRACTICAL APPLICATIONS

- The icon for each of the Cards is the focus point. It's the recognition factor for the thinking strategies. Teach students to actually draw these icons, so that they can then plan their thinking by using the icons and single arrows to represent the sequence. Also, experiment with drawing the icon sequences in circles, or waves, or boxes, or spirals, rather than just linear patterns. Work out what best suits the learning experience.

- For primary classrooms (and some secondary), hang them in large plastic wallets around the room, so that both sides of the Cards can be easily seen. They can then be taken out of the wallets if needed for direct instruction.

- Attach Velcro buttons to the back of each Card, and then adhere them to a large felt board. They then can be rearranged according to the sequence being discussed at the time.

- Create some Thinking Certificates for your thinking achievers. Introduce an element of personal competition, and develop some levels or designations that are worth attaining. The levels could include:

1. Novice Thinker. Can explain 4 Cards, and can apply them in context with an issue. These four could be: Purpose, Info, Challenge, Improvements (although, feel free to choose others if you wish. I'm not saying that these are the most important four. They're just one option for your choices)

2. Competent Thinker. 10 Cards.

3. Master Thinker. The full 20 Cards.
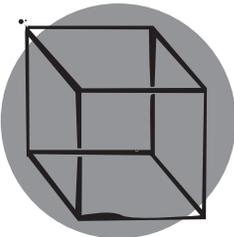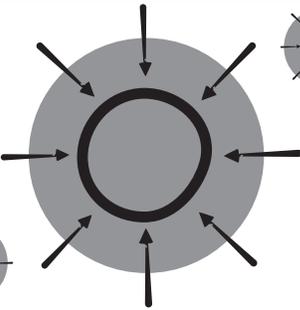
BAR?

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Critical / Organisational

Three Whys

Reflection

Question

Consequences

Decisions

Action

Purpose

Rubrics

Perspectives

Info
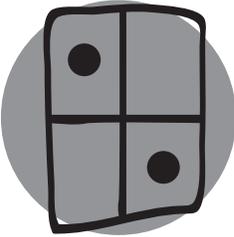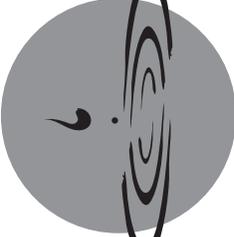
Creative / Innovative
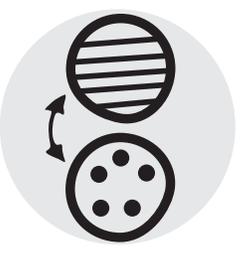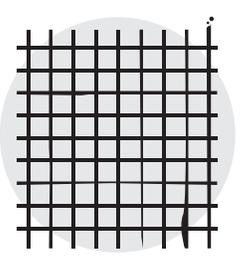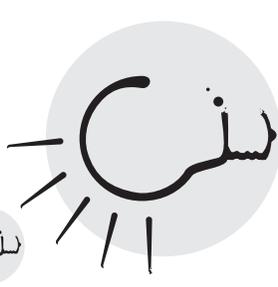
Combination	**Reverse**	
In Common	**Challenge**	
Predictions	**Brick Wall**	
Brainstorming	**Inventions**	
Improvements	**BAR**	
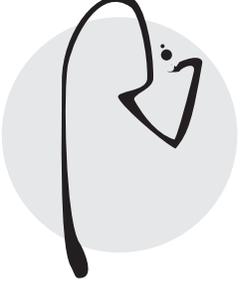
THE THINKING ORGANISER

The Thinking Organiser sheet on pages 5 and 6 helps students to get their thinking organised, regardless of how few or how many Thinkers Keys that they use at any one time. They will rarely, if ever, use the whole twenty Cards at any one time. In many cases, they might only use three or four.

Here are some practical ideas for the use of the Thinking Organiser:

Idea One: The full process

Step 1. Introduce the learning task. This may have come from your instigation, or it may have resulted from student interest in a topic.

Step 2. Use the Thinking Organiser to clarify the thinking / learning process that students can use to explore the topic. Generally, numbers are allocated in the small boxes beside the icons, to denote the order of the sequence.

Step 3. Then launch into the full learning experience, while constantly referring to the process that has been established at the start. However, adjustments to the process are strongly encouraged. Don't be rigid with that process. If students decide that there is a more effective way of proceeding with their thinking, then that's fine.

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Idea Two : Master Copies

Make copies of the Thinking Organiser sheet (NB. As part of the IP that you acquired with this Kit, you're entitled to make those copies… as long as you purchased the Kit), and laminate them for ongoing use with a class. By using marker pens, students can organise their thinking by numbering the Keys in sequence. The marks can later be erased, and the laminated sheet then reused.

Idea Three : Reference Sheets

Place a copy of the Thinking Organiser sheet into relevant workbooks or handouts. They then can be used as a reference and / or stimulus before, during and after the learning task. If you're super-flexible, you may even encourage them to colour in the Cards (ie Purple and Orange). Believe it or not, even adults enjoy colouring them in.

Idea Four : Mini-cards

Make photocopies of the Thinking Organiser sheet. Laminate them, and then cut them up into the individual cards. They're a fantastic organising mechanism for students when they're working with their task. I find that they often pick one up, and directly refer to the specific Key's importance at some point in a learning discussion. Warning: these small cards easily get lost! Make a few extra copies.
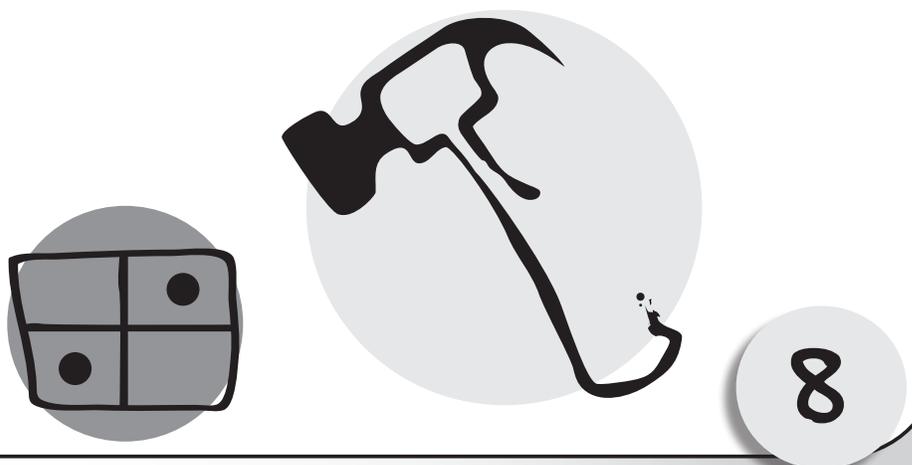
THINKING SEQUENCES

Encourage your students to experiment with their own sequences. And, make up your own as well. There are no groundrules here. However, if you would like to offer some options to your students, try some of these:

1. **Enhancement:**
   Purpose, Improvements, Action, Reflection.

2. **Personal hassles:**
   Info, Brainstorming, Consequences, Reflection.

3. **Analysis:**
   Info, Rubrics, Reflection.

4. **Extreme:**
   Challenge, Predictions, Consequences, Reflection.

5. Inquiry / Solution:
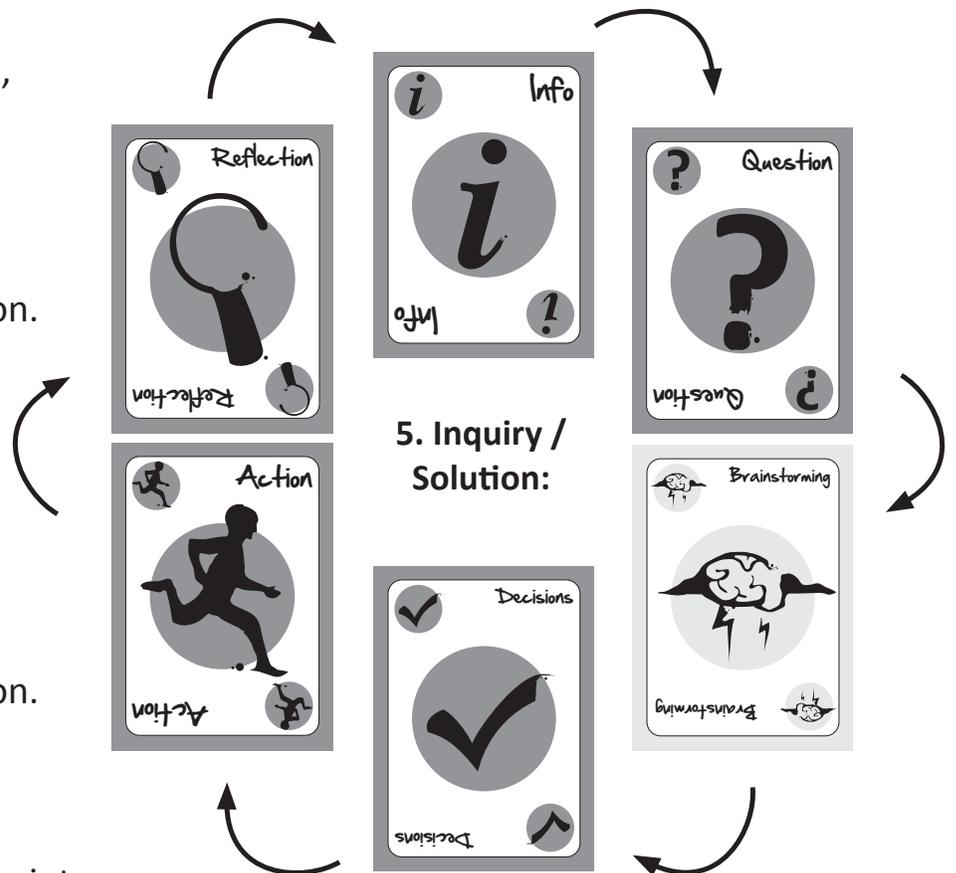
You will notice two common points with these sequences:

- They all have the Reflection card in them. Zest thinking has a touch of Zen to it. And that means that you may need to ponder and reflect upon your thinking on occasion. The Reflection card also could be placed between any two of the other Keys at any time. As well, it could be placed in the middle of the circle.

- They can each be drawn in a circle (eg the Inquiry/ Solution circle up above). Thinking is rarely a linear progression. It occurs in stops and starts, and can go anywhere at any time. On some occasions, this circle could even include some spokes, which connect every Thinkers Key Card with every other one in the circle.

A further point: Experiment with other 2-D or even 3-D shapes to represent a sequence. Triangles sometimes work well; and my gut Zen feeling is that a sphere would eventually be the penultimate thinking organiser. Good luck with working it out!

POWERFUL PLANNING

How you plan is up to you. However, I strongly encourage a number of core applications within a planning framework. These would include:

- An explicit focus on an inquiry task that is intellectually rigorous. As much as anything else, this is more likely to generate a higher level of thinking during that unit study.

- A clarification of the core understandings that you wish to encourage during the study. Students need to know what it is that they will understand by the completion of the learning.

- One unit question (although there may sometimes be up to three) that directly refers to the core understandings. These Socratic questions would challenge at the highest possible intellectual levels eg in using the Question card, you may eventually decide upon: What is a quality life?

- A list of the Thinkers Keys near the top of the Unit outline, as a reminder of the possible processes that can be used during the study. Then include them in the planning, and even use a different colour (eg orange or purple) when you write them into the plan.
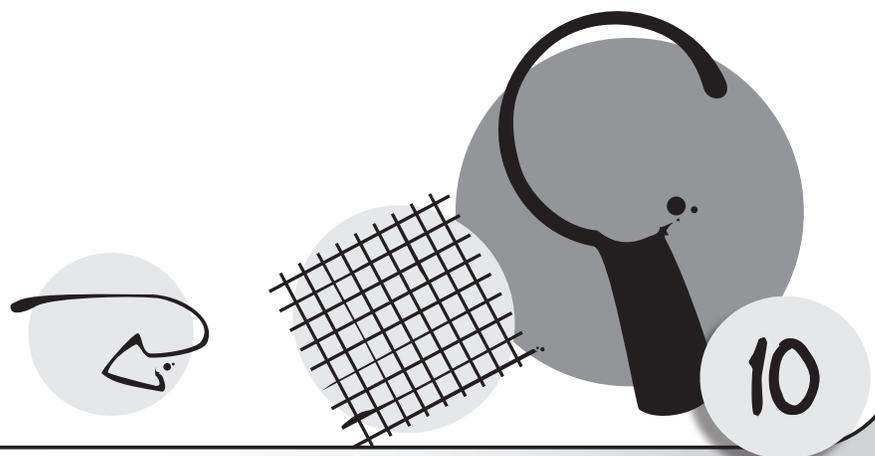
THINKING FRAMEWORKS

There are many thinking frameworks that can be used as a foundation for the teaching of thinking. Depending upon what you would call a 'thinking framework', they can include Blooms Taxonomy, Williams Taxonomy, de Bono's Six Hats, and Habits Of Mind. If you already are making use of some / all of these frameworks, the Thinkers Keys will give you direct support with these frameworks.

As an example, here are some of the Thinkers Keys that can support Bloom's Taxonomy:

Remember.:   Info, Rubrics, Brainstorming
Understand: Question, Purpose, Perspectives
Apply: Action, Decisions, Improvements
Analyse: Purpose, Three Whys, Perspectives
Evaluate: Reflection, Consequences, Purpose
Create: Challenge, Brainstorming, Combination

A further point: Did you notice that Brainstorming was placed into the opposite ends of the Taxonomy? This is because of the variations in the way that you can apply any of these Keys. You could easily brainstorm a list of relevant facts; or you could brainstorm a list of highly unlikely consequences for a particular action. Same Thinkers Key. Different context.
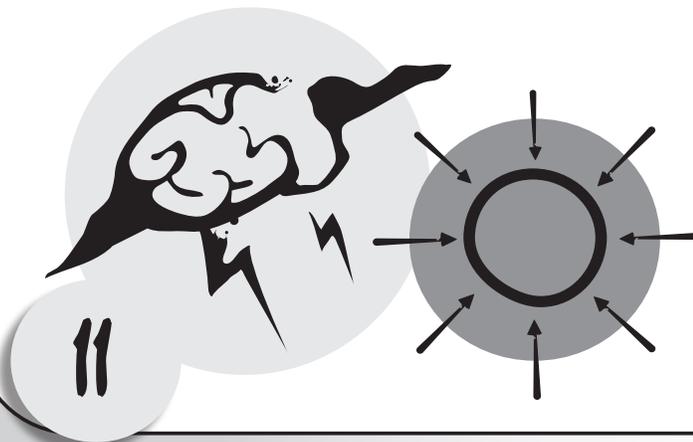
WRAP-UP POINTS

Core Issue 1.

Ethics. Be aware that thinking can be a subversive activity. You must teach thinking from an ethical perspective. The last thing we all want to see are 8 or 14-year olds applying their thinking to destructive and unethical practices. When you facilitate learning tasks, instil core values that advance local and global humanity.

Core Issue 2.

Collective Intelligence. Encourage young people to co-create (perhaps, even eco-create) in online and offline environments. Develop learning network environments that draw on the collective thinking and energy of people working together. Thinking is enhanced through collaborative activity that is based upon deep collective purpose, mutual trust, and a desire to engage in pro-social dialogue.

Core Issue 3.

Teacher rolemodelling. The most critical model for student thinking is the teacher. Anything else that has been outlined in this booklet will be much more effective if you rolemodel the use of these processes during your engagement with your students. Demonstrate the quality of your own thinking at every opportunity.

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