

**HIGHER ORDER THINKING**

**A COMPILATION OF H.O.T. STRATEGIES  
THAT CAN BE ADAPTED FOR R.E.**

## 3:2:1 Strategy

3:2:1 is a strategy for quickly assessing student attainment of concepts during a lesson. Students capture or summarise their thinking about a main idea by writing down three ideas about one aspect of the concept, two aspect of another related aspect of the concept and one idea of a third aspect.

For example after a class discussion on Jesus, students write down:

three examples of actions of Jesus in his lifetime.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

two examples of actions of Christians today.

1. \_\_\_\_\_
2. \_\_\_\_\_

one way people in society are affected by the actions of Christians who are modelling the actions of Jesus.

1. \_\_\_\_\_

# Attitude Analysis Strategy

An Attitude Analysis strategy plays on and is a combination of, the two words act and attitude. It helps students make connections between attitudes and actions of people and groups.

An Attitude Analysis pro-forma supports students to firstly analyse a given idea, doctrine or position held by a person or group. Secondly, it helps students summarise the meaning. Thirdly, it helps students identify and record the Attitudes/ Values imbedded in the idea, doctrine or position. Fourthly, it helps students devise Actions / Practices that match the attitudes and values.

<b><u>Attitude Analysis</u> of ...</b>	
<b>Summary</b>	
<b>Attitudes/Value</b>	<b>Action/Practice</b>

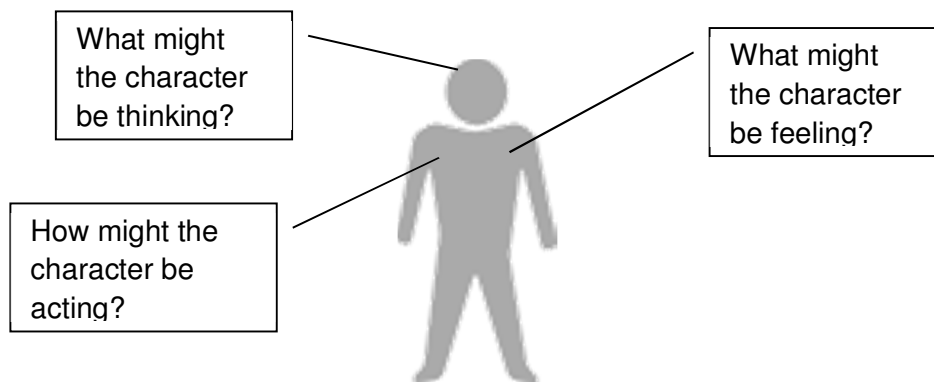
[Taken from Strategies for Teaching Religious Education, Catholic Education Office, Brisbane]

# Character Map

This strategy helps students select and describe a character from a story and then present evidence to justify the character's description. The students can also use this strategy as a way of comparing/contrasting between two different characters from either the same story or from another.

The students choose a character that they wish to describe in detail.

1. The students complete a character map by filling in information about the character under three headings: feelings, actions, and thoughts. The evidence comes from the story and supports the personality characteristics. Other categories can be added according to the activity.
2. The students share and discuss their character maps with the class.



[Taken from *Strategies for Teaching Religious Education*, Catholic Education Office, Brisbane]

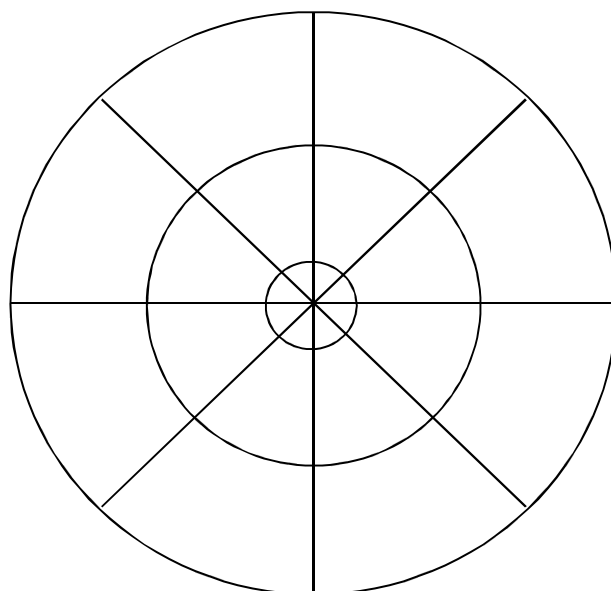
# Concept Spiral Strategy

A concept spiral is a useful device for helping students to develop conceptual knowledge at a number of levels. It incorporates visual and written text types.

A concept spiral consists of 3 cardboard circles of different sizes that, when placed one on top of the other, are fixed in the centre with a spilt pin. This allows each of the circles to rotate freely.

Each of the circles can be divided into equal portions- that is, divided into pieces of pie according to the number of concepts under investigation.

(For example, a concept spiral could be constructed to explore church ministries. On the inside circle students could record a church ministry for each piece of pie: e.g. education, health, justice, welfare, liturgy and worship. On the middle circle students provide examples of how each of these ministries are put into practice in the local community. On the outside circle students design a symbol or image that is the essence of each of these ministries. Pieces of pie are colour-coded to show connections between elements of each circle. On completion, concept spirals can be used for students to demonstrate their conceptual knowledge.)




[Taken from *Strategies for Teaching Religious Education*, Catholic Education Office, Brisbane]

# Compare / Contrast Strategy

Compare / Contrast Charts do just about what you'd expect them to with a name like that: they're useful for looking at two quantities and determining in what ways they are similar and in what ways they are different. The chart pictured here is one way to approach this comparison. First you look at the similarities. Then you consider the differences, making sure to indicate on what criteria you are drawing out the dissimilarities.

## Compare and Contrast Diagram

Concept 1	Concept 2						
 <b>HOW ALIKE?</b>							
<table border="1" style="width: 100%; height: 100%;"><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr></table>							

## HOW DIFFERENT?

	<i>with regard to</i>	

[Taken from *Strategies for Teaching Religious Education*, Catholic Education Office, Brisbane]

# Developing a proposal strategy

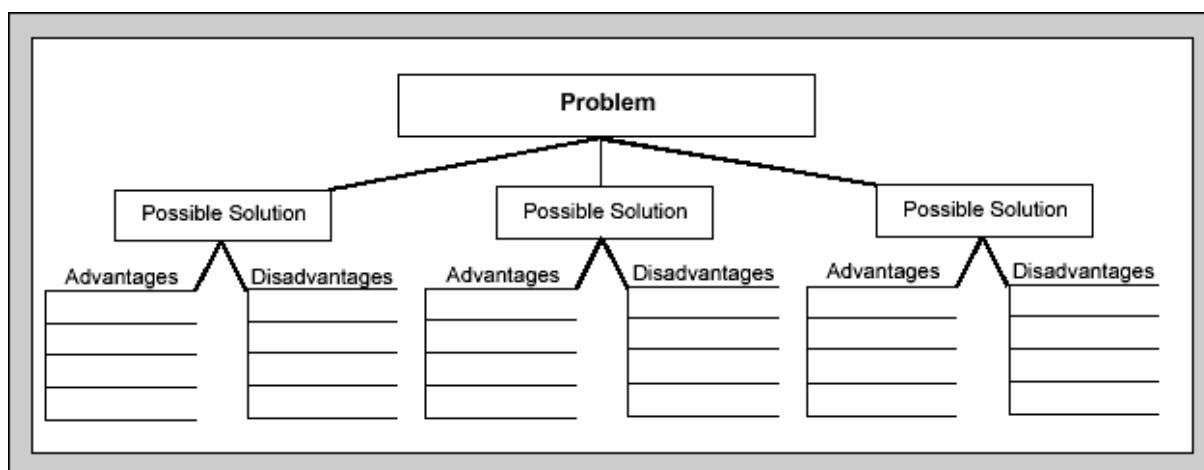
- Proposals convince their audience to adopt an idea and implement it – i.e. should it be done?
- Proposals ask decision-makers to allocate time, money, and other resources to change something.

## Decision Tree

Decision Trees are graphic organiser strategies in which students use diagrams or decision trees to illustrate real or possible outcomes of different actions. These graphic organisers enable students to structure the decision-making process.

Students visually depict outcomes for a given problem by charting various decisions and their possible consequences.

To provide practice for students, describe hypothetical real-life situations that are age appropriate. Students identify possible solutions, advantages, and disadvantages for each solution.



[Taken from *Strategies for Teaching Religious Education*, Catholic Education Office, Brisbane]

# SCAMPER Strategy

## What is it?

SCAMPER is a strategy that can be used to assist students to generate new or alternative ideas. It is a tool to support creative, divergent thinking. SCAMPER is an acronym for: substitute, combine, adapt, modify/magnify/minify, put to other uses, eliminate, reverse/rearrange.

## What is its purpose?

SCAMPER helps students ask questions that require them to think "beyond the lines" of a text. As such, it helps develop their critical thinking skills and supports them in constructing their own imaginative texts. It is a useful cooperative learning tool and a great stimulus for role-play.

## How do I do it?

The strategy is often best used after students have spent some time studying a text. Explain the purpose of the strategy to the students, encouraging them to open up their minds to a range of creative possibilities. The following example shows how SCAMPER can be used to generate interesting questions when working with Goldilocks and the Three Bears.

### **S: Substitute** (a person, place, time or situation)

What do you think would have happened if there had been a Crazy Scientist Bear instead of Father Bear?

### **C: Combine** (bring together assorted ideas and situations)

What would have happened if the three bears were returning from a reunion with relatives who had escaped from a zoo where they had been badly treated by the zookeepers?

### **A: Adapt** (or adjust to suit a purpose)

How might the story have changed if Goldilocks had had a leg in plaster and was using crutches?

### **M: Modify** (for example, by changing the physical size or personality traits of some characters or changing the setting)

What would have happened if the bears had been cubs and much smaller than Goldilocks?

### **P: Put to other uses** (for example, put a different slant on the plot)

What if Goldilocks was only pretending to be lost and was really looking for an excuse to break into other people's houses?

### **E: Eliminate** a feature of the story

How might the story change if there were no Father Bear?

### **R: Rearrange** or reverse the sequence of the story

What if Baby Bear had returned home before the others?







## How can I adapt it?

It is not necessary to use all the steps in SCAMPER. Steps can be selected and combined in a variety of ways to match your teaching intentions.



# Six Thinking Hats Strategy

Edward de Bono has devised this strategy to encourage diverse thinking, problem solving and decision-making. This strategy suggests the concept of six different coloured hats used as analogies for thinking in different ways. The hats and the types of thinking they encourage are:

	Red Hat	Feelings and emotions
	Blue Hat	Thinking about my thinking (metacognition)
	Yellow Hat	Positive issues
	Green Hat	Creative Improvement
	Black Hat	Negative Issues
	White Hat	The Facts

Some questions that facilitate learning, problem-solving or decision-making activities include:

## **Red Hat (Emotional Reactions)**

What are prominent feelings about an idea or issue?

## **Blue Hat (Reflecting on the process/metacognition)**

What strategy used for learning/ solving problems or decision-making was most effective for the idea or issue? Which hat was the best for this idea or issue?

## **Yellow Hat (Positive Tracking)**

What are the positive aspects, strengths and advantages of the idea or issue?

## **Green Hat (Creative Improvement)**

What are some ways the idea, issue or problem can be improved or made better?  
How many creative uses are there for this idea or issue?

## **Black Hat (Negative Issues)**

What are the disadvantages or negative aspects of the idea or issue?  
What are the weaknesses, dangers and problems?

## **White Hat (Collecting Information/Facts)**

What are the facts?  
What core information is needed to help understand the problem, issue or idea?  
What questions need to be answered to solve the problem?

Teachers use this strategy once an idea, issue or problem is established. The students then engage in thinking about this idea, issue or problem by using all, or some of, the thinking hats in small group or whole class scenarios. Once students have engaged in this thinking strategy the data generated can be used to enhance other learning purposes and contexts.

[Taken from *Strategies for Teaching Religious Education*, Catholic Education Office, Brisbane]

# Social Ladder

A Social Ladder is a strategy which requires students to rank or sequence. It involves sequencing social positions in a particular society at a particular time.

Students place the societal group in the organiser in the appropriate position, lowest to highest, according to the privileges and standing each group has. Ranking is often based on individual values and judgments about the relative importance of the criteria used in determining the rank of specific groups. Therefore, it is important for students to give reasons for the rank orders they have selected. Verbalising their rankings helps students think about their thinking and clarify their choices.



Students:

- ❑ Read a Scriptural text. Select the main characters in the text and place the characters on the ladder provided in what seems to be their place on the social ladder in the time of Jesus.
- ❑ Record or state their rationale for the placement of the characters on the ladder.
- ❑ Discuss how Jesus reacted to the established social orders such as hierarchal social structures.

# SWOT Strategy

This strategy is an excellent higher level thinking strategy students can engage with to evaluate and think laterally about a decision on an issue, a solution to a problem or an simply an existing situation. The information retrieved from this strategy is usually applied to another purpose or design.

A suggested process for using this strategy effectively involves combining it with another strategy called the **Jigsaw Strategy**. This strategy has been featured in a number of the Religious Education modules.

Process:

- ❑ Students form learning teams of four and are given one of the four SWOT cards. See below.
- ❑ Before proceeding it is important for everyone in the learning team to be familiar with the issue or problem under consideration.
- ❑ Students now leave their learning team and form *Expert Groups* consisting of students with the same SWOT card (Strengths, Weaknesses, Opportunities, Threats)
- ❑ In their Expert Groups students brainstorm as many responses as they can in a given time frame.
- ❑ Students now leave their Expert Groups and return to their Learning Team. One at a time they share the ideas generated in the Expert Groups.

<b>Strengths</b>	<b>Weaknesses</b>
<b>Opportunities</b>	<b>Threats</b>

# Think Pad Strategy

A Think Pad is essentially a reflective activity designed to nurture *connected knowing*. This form of knowing focuses on discerning relationships within parts of the information to be learned as well as forming relationships between the information and one's own knowledge and experience.

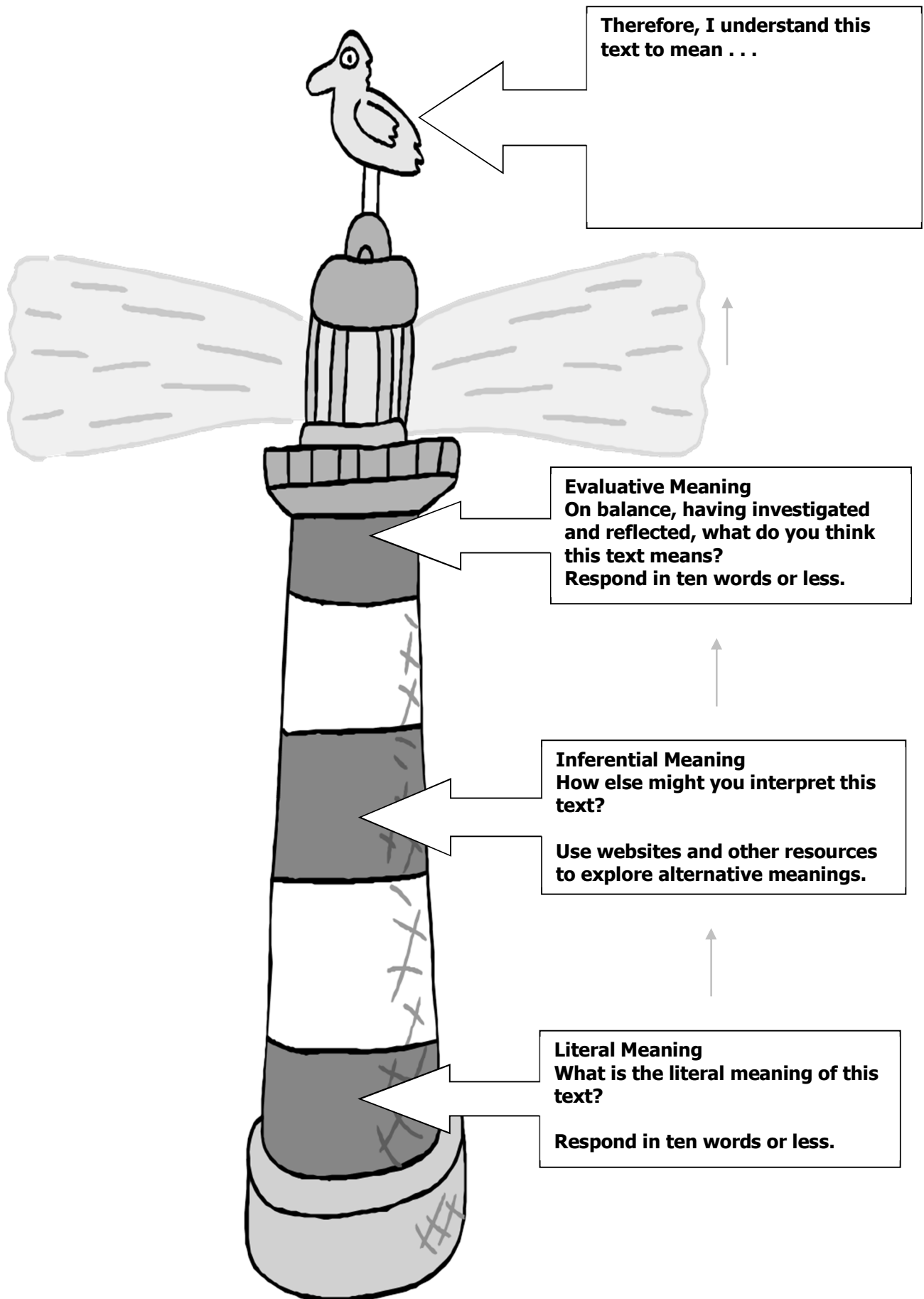
There are four dimensions to a Think Pad:

- ❑ **Words**  
Students describe in one or two sentences the meaning of a text.
- ❑ **Pictures**  
Students draw a sequence of pictures depicting the events described in a text.
- ❑ **Connections to Life**  
Students write or illustrate how the text might apply to a real life situation in the contemporary world.
- ❑ **Symbols**  
Students draw one or more symbols that might capture the key themes of a text.

<b>Words</b>	<b>Symbols</b>
<b>Pictures</b>	<b>Connections to Life</b>

# Three Level Lighthouse

[Taken from *Strategies for Teaching Religious Education*, Catholic Education Office, Brisbane]

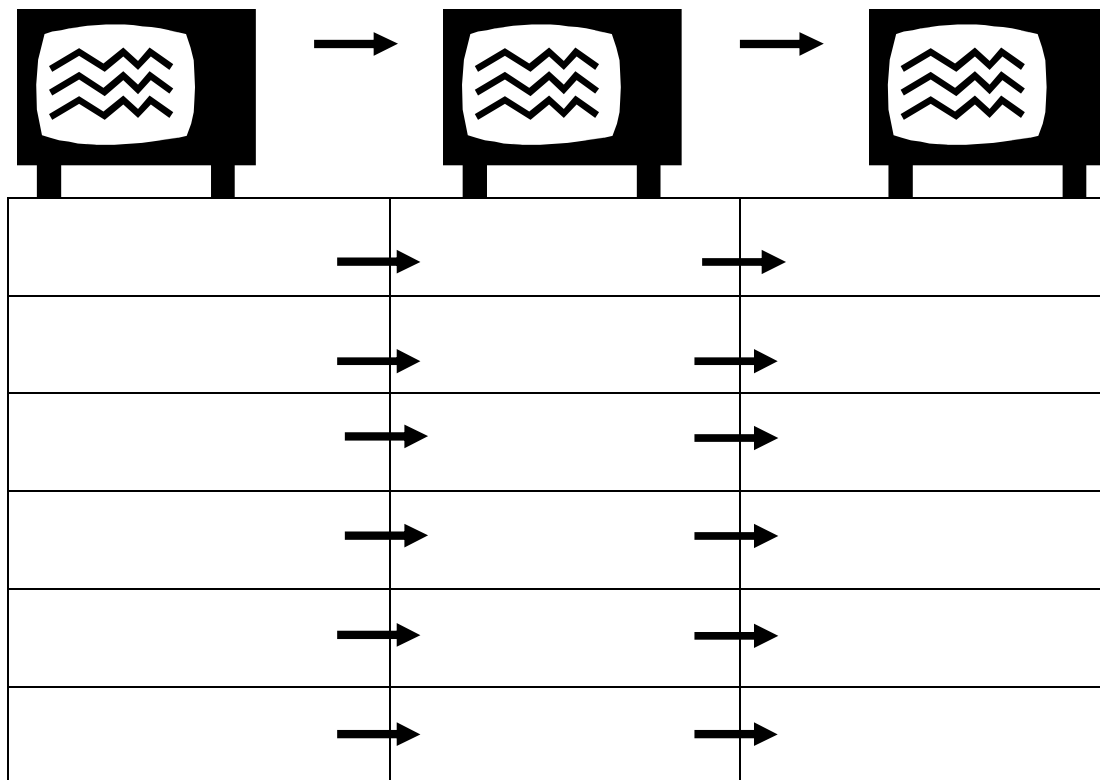


# Triple Play Strategy

In the Triple Play Strategy students pinpoint the key episodes of a text (e.g. scripture passage). Subsequently they replay the highlighted themes with two alternative storylines. The second storyline is a retelling of the text relevant to the personal life experiences of students. The triple play involves students in developing a contemporary story sequence that captures the spirit of the text in the context of a broader world scene.

## Process

1. Each team is given a text that can easily be divided into episodes as well as a Triple Play worksheet (see below). The parables a good source for Triple Play episodes.
2. **Initial Play.** The learning team reads the text and determines the key episodes that make up the storyline. Approximately six episodes are suggested.
3. Each episode is depicted by both an illustration and a caption. If it is a scripture passage the exact chapter and verse reference could also be recorded.
4. **Replay.** The team discusses and arrives at an alternative storyline that is relevant to their current life experiences as students, family members, or local community members. The story should follow the same theme and episodes as in the original text but with contemporary characters and in a different setting.
5. **Triple Play.** The process is repeated except on this occasion the students must think more broadly and try to develop a storyline that would situate the text within a global context.



[Taken from *Strategies for Teaching Religious Education*, Catholic Education Office, Brisbane]

# WAPPT Strategy

The WAPPT Strategy enables students to explore a text by locating and recording the:

- ❑ Core **Words** located in the text
- ❑ Important **Actions** or gestures named in the text
- ❑ **People** named in the text
- ❑ **Places** named in the text
- ❑ **Things** named in the text

# What If...Strategy

The What If strategy enables students to reflect on problems, situations to visualise a better time and place.

Process for What If:

- ❑ Students think of situations /problems that we experience in our lives.
- ❑ Students generate ideas on the consequences of using moral actions of caring for our environment, charity, kindness, generosity, love, expressing joy, being peaceful people, patience, goodness, faithfulness, gentleness, and self-control.
- ❑ Students draw, paint, or create a collage of their ideas.



*What if we cared for our environment?*



# WINDOW PANING STRATEGY


## WINDOW PANING [Kagan Structures]

1. Teacher presents a key idea or fact.
2. Teacher models filling in the first window pane: drawing a simple drawing to represent a fact or idea.
3. Students fill in their first window pane with their own drawing based on information presented.
4. Repeat steps 2-4 for each idea or fact until all window panes are filled.
5. On a blank Window paning sheet, students attempt to replicate their completed sheet from memory.

[Taken from *Accelerating Achievement Through Kagan Structures* by Laurie Kagan]



# TIPPING THE SCALES

Tipping the scales is an activity students can use to evaluate the extent to which their ‘solution’ meets predetermined criteria.


Students analyse their ‘solution’. By listing pros and cons and weighing them up against criteria, students can judge their ‘solution’.

## PROCESS

1. Students receive a blank copy of the Tipping The Scales Framework and record their ‘solution’ at the top.
2. Students list pros and cons of their ‘solution’ in the appropriate column.
3. Students use predetermined criteria and assign each statement in the pros and cons columns a score from 1 (weak) to 3 (strong).

[Alternative scoring method: Students working on a ‘solution’ stand in a line. As each statement is read out, students decide how well it meets the criteria and take steps to the right or left accordingly. Once all statements have been read out the final positions of the students will indicate which side the scales have tipped.]

4. Students add up the scores to determine to what extent their ‘solution’ has met the criteria.
5. Students decide if further information or investigation is required to make their ‘solution’ better.

		<h2>TIPPING THE SCALES FRAMEWORK</h2>	
<b>CHOSEN SOLUTION:</b>  			
<b>PROS</b>	<b>SCORE</b>	<b>CONS</b>	<b>SCORE</b>
<b>TOTAL</b>		<b>TOTAL</b>	

[Taken from *Tactical Teaching: Thinking*, Course Book of STEPS Professional Development]

# WHAT COULD IT BE?

What Could It Be? Is an activity that gets the creative juices flowing. It gives students the opportunity to think outside the box.

What Could It Be? Stimulates imagination by encouraging multiple answers to the same question. This is an activity that can be used to stimulate thinking about different angles students may use to pursue or motivation for further study.

## PROCESS

1. Show or give students an object or other stimulus. Ask open ended questions, such as: What could this be? What might this be used for?
2. Students take time sharing ideas.
3. If an idea is repeated, students need to be more specific or add further detail to differentiate it from the other response.
4. Students use the ideas as a springboard for exploring possibilities

**Stimulus:** Piece of fabric.

**Question:** What has this to do with Jesus?

### Possible answers:

- His outer garment ruffled off by the soldiers
- His loincloth
- The veil used to wipe his face
- The table cloth at the Last Supper
- The veil of the Temple
- The cloth used to lower the cripple through the roof
- His burial cloth found folded up in the tomb
- The separate burial cloth placed over his head
- The cloth used in the parable of the new patch



# BOTH SIDES OF THE COIN

Both Sides Of The Coin is a forced-analogy activity in which students are required to make comparisons where none exist.

Students identify similarities and differences between two disparate ideas or items. By making connections between the problem and something totally random, new links are made. This type of thinking promotes ideas for further investigation and innovative solutions.

## PROCESS

1. The teacher models the development of a forced analogy
2. Students in groups list at least five similarities and five differences between the two objects or ideas.
3. Students record their ideas on large sheets of paper and these are presented to the whole class.
4. The class discuss the effectiveness of the various comparisons
5. Students are given opportunities to generate forced analogies using learning area concepts. Students are asked to justify their analogies.

<b>Lent and Flying to the Moon</b>	
<b>How is Lent like Flying to the Moon?</b>	<b>How is Lent not like Flying to the Moon?</b>
<ul style="list-style-type: none"><li>• Both are long journeys</li><li>• Both involve preparation</li><li>• Both require 'sacrifice'</li><li>• Both require eating habits to change</li><li>• Both have a definite destination</li><li>• Both start with ashes</li><li>• Both give time for reflection</li><li>• Both conclude with celebration</li><li>• Both can be 'religious' experiences</li></ul>	<ul style="list-style-type: none"><li>• One requires special clothes – the other doesn't</li><li>• One involves outer space – the other involves inner space</li><li>• One requires that you eat well – the other doesn't</li><li>• Flying to the moon doesn't use the colour purple</li><li>• One is a 'new' journey – the other is ancient</li></ul>

[Taken from *Tactical Teaching: Thinking*, Course Book of STEPS Professional Development]

# CSI – A FORENSIC APPROACH

CSI – A Forensic Approach is an activity where students critically examine an issue/problem and outline the various ways it may be viewed.

Effective thinkers are able to consider an issue/problem from different angles and viewpoints and use this knowledge to make reasoned judgements. CSI – A Forensic Approach gives students the opportunity to explore options from a broader perspective.

## PROCESS

1. Student are presented with a task and asked to draw a three-column chart with the following titles: Challenges, Successes and Issues
2. Students discuss and record the challenging aspects of the task.
3. Students do the same for the other two columns.
4. Students are encouraged to use the chart as a starting point for weighing up and making judgements of the list of factors.

## POSSIBLE ADAPTION

1. Add another column titled ‘viewpoints’.
2. Students consider the information in the other three columns from at least one other point of view.
3. Change Issues to Interesting if it is more applicable

Topic: Jesus forgave his enemies. Should we forgive those who hurt us?		
Challenges	Successes	Issues
<ul style="list-style-type: none"><li>• Will they learn anything if we just forgive them for doing wrong?</li><li>• It is really hard to forgive when you have been hurt by someone</li><li>• Other people will think you are weak</li></ul>	<ul style="list-style-type: none"><li>• The person who hurt you may become your friend</li><li>• Nor retaliating means things won't go any further</li><li>• We are living like Jesus taught</li><li>• You don't want to be just like them</li></ul>	<ul style="list-style-type: none"><li>• Jesus said to forgive so we should</li><li>• Jesus was 'holy' so it was easy for him</li><li>• Jesus said they didn't know what they were doing but the person who hurt me knew what they were doing</li><li>• Is everything forgivable?</li></ul>

[Taken from *Tactical Teaching: Thinking*, Course Book of STEPS Professional Development]

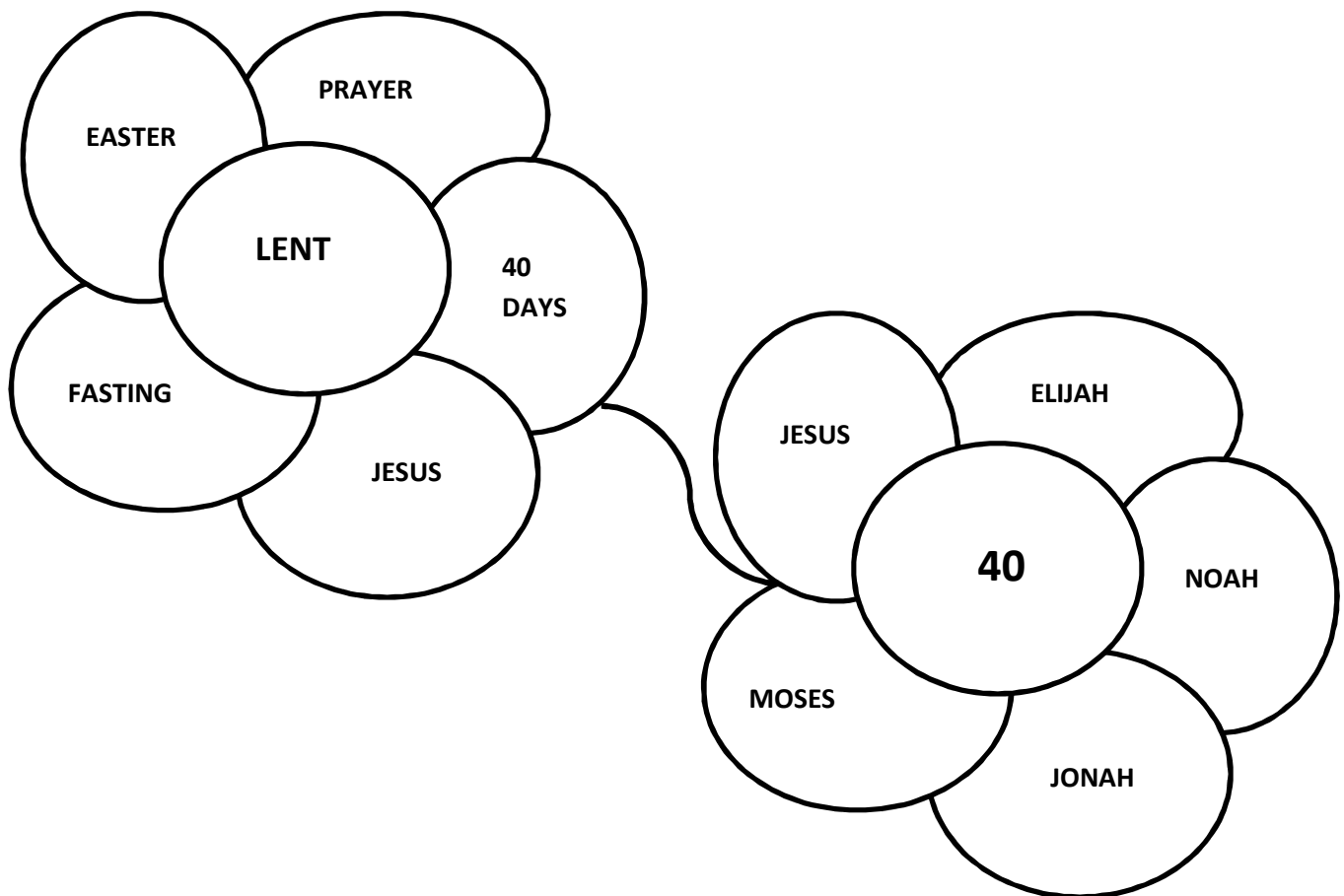
## TEASING IT OUT

Teasing It Out is an activity where students break broad topics into components. Each time the student 'teases it out' the topic is broken down into smaller parts, analysed or prioritised.

Teasing It Out supports students to engage in critical analysis as they explore new ideas. Creating a visual framework assists with the organisation of ideas and identifies relationships between them.

## PROCESS

1. Students are provided with a visual framework such as a daisy chain
2. Students record the key idea or topic to be investigated in the central circle
3. Students tease out the topic into smaller components and record these ideas on adjoining circles (petals)
4. Students decide which of the smaller components can be further broken down. They choose one of these and rewrite the new key idea in a new daisy circle. This is then broken down into smaller components.
5. Students repeat the process for as long as it is useful



[Taken from *Tactical Teaching: Thinking*, Course Book of STEPS Professional Development]