

## Module 5: Teaching the competences and values

Guidance material	5.1.2 Teaching Creativity Grade 7-9
What is the purpose of this material?	<ul style="list-style-type: none"> <li>This is a selection of teaching strategies and teaching templates to support the teaching of creativity</li> </ul>
When to use this material?	<ul style="list-style-type: none"> <li>When introducing the competences to teachers to support them in implementing this competence in their class programme.</li> </ul>
With whom to use this material?	<ul style="list-style-type: none"> <li>Teachers</li> </ul>
Have you considered these materials first?	<ul style="list-style-type: none"> <li>Introduce teachers to the SCF through: <ul style="list-style-type: none"> <li>1.1 <i>What is the SCF?</i></li> <li>1.2 <i>Structure of the SCF</i></li> <li>1.3 <i>Definitions matching activity</i></li> <li>1.4 <i>Prior knowledge brainstorm activity</i></li> <li>1.5 <i>Close reading – Executive summary</i></li> <li>1.6 <i>Close reading – Framework Requirements and Exemplifications</i></li> </ul> </li> <li>4.1 <i>What are competences?</i></li> <li>Introduce teachers to this competence through: <ul style="list-style-type: none"> <li>4.1.1 <i>What is Creativity?</i></li> </ul> </li> </ul>
How to use this material?	<ul style="list-style-type: none"> <li>This resource can be used in a range of ways, for example: <ul style="list-style-type: none"> <li>Share with teachers and discuss it in staff meetings or team meetings.</li> <li>Encourage teachers to plan using the ideas in this resource.</li> <li>Encourage teachers to adapt the teaching strategies and templates below to meet their grade level, curriculum area and student's needs.</li> <li>Discuss the ideas and then ask teachers to share their own ideas for teaching this competence.</li> </ul> </li> <li>For more information on each competence read the <i>Framework Requirements &amp; Exemplifications</i> section of the <i>Abu Dhabi Education Council Student Competence Framework (SCF) for Private Schools - Competences for Abu Dhabi's 21st Century Learners (2014)</i>.</li> <li>Note: All websites were checked at the time this guidance material was created. Any website used in an educational context should be checked for accuracy and appropriate content. Links to other websites from this material should not be taken as endorsement of those sites or of content/products offered on those sites</li> </ul>
What resources or equipment are needed?	<ul style="list-style-type: none"> <li>Copies of the <i>Framework Requirements &amp; Exemplifications</i> section of the <i>ADEC SCF for Private Schools (2014)</i>.</li> </ul>

### Teaching Creativity Grade 7-9

Here are some strategies and teaching approaches to try in your classroom to promote creativity:

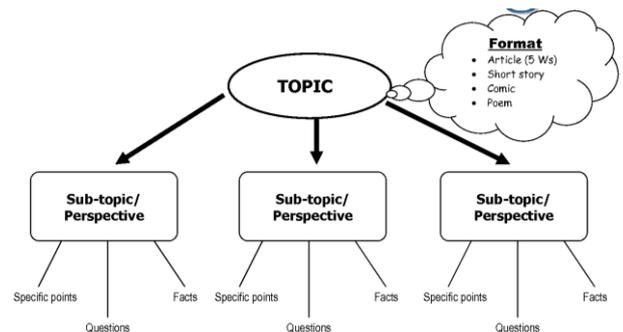
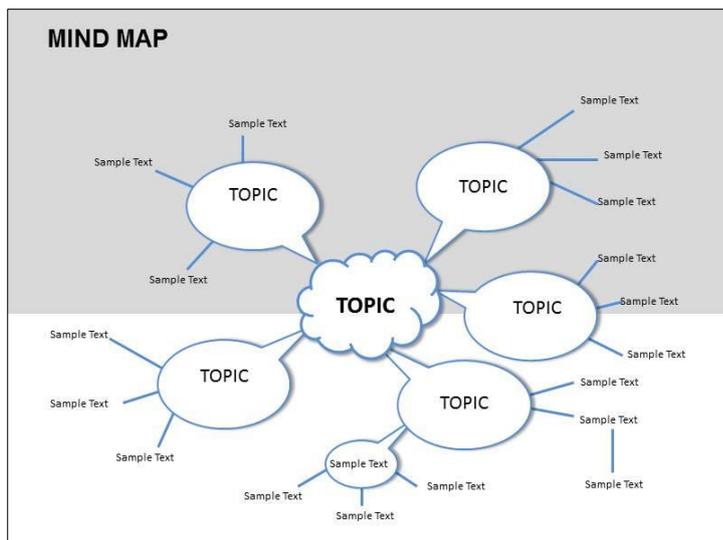
- Students create a game based on real life (e.g. the fastest way to get to the top of a mountain). They develop the constraints, parameters and options. They analyse the fairness of different approaches.
- Learners who are creative and innovative demonstrate originality and are inventive in creating new ideas, artefacts or solutions to problems. Encourage students to use a range of idea creation techniques such as discussion, brainstorming, mind mapping or questioning assumptions.
- Provide opportunities for students to reflect on the output of their creative endeavours and use this as a basis for refining their work.
- Encourage students to appreciate the relevance and learn from the creative work of others.
- Brainstorming and mind mapping support students to gather their ideas by *communicating imaginative and original ideas, artefacts or approaches*. Below are some websites to assist you with brainstorming and mind mapping:



[Ten mind mapping strategies for teachers](#)

[How can I facilitate brainstorming in the classroom?](#)

[Brainstorming ideas](#)



- Creative problem-solving allows students to generate creative and new ideas and approaches to problems. Try the Alex Osborn approach to creative problem-solving:

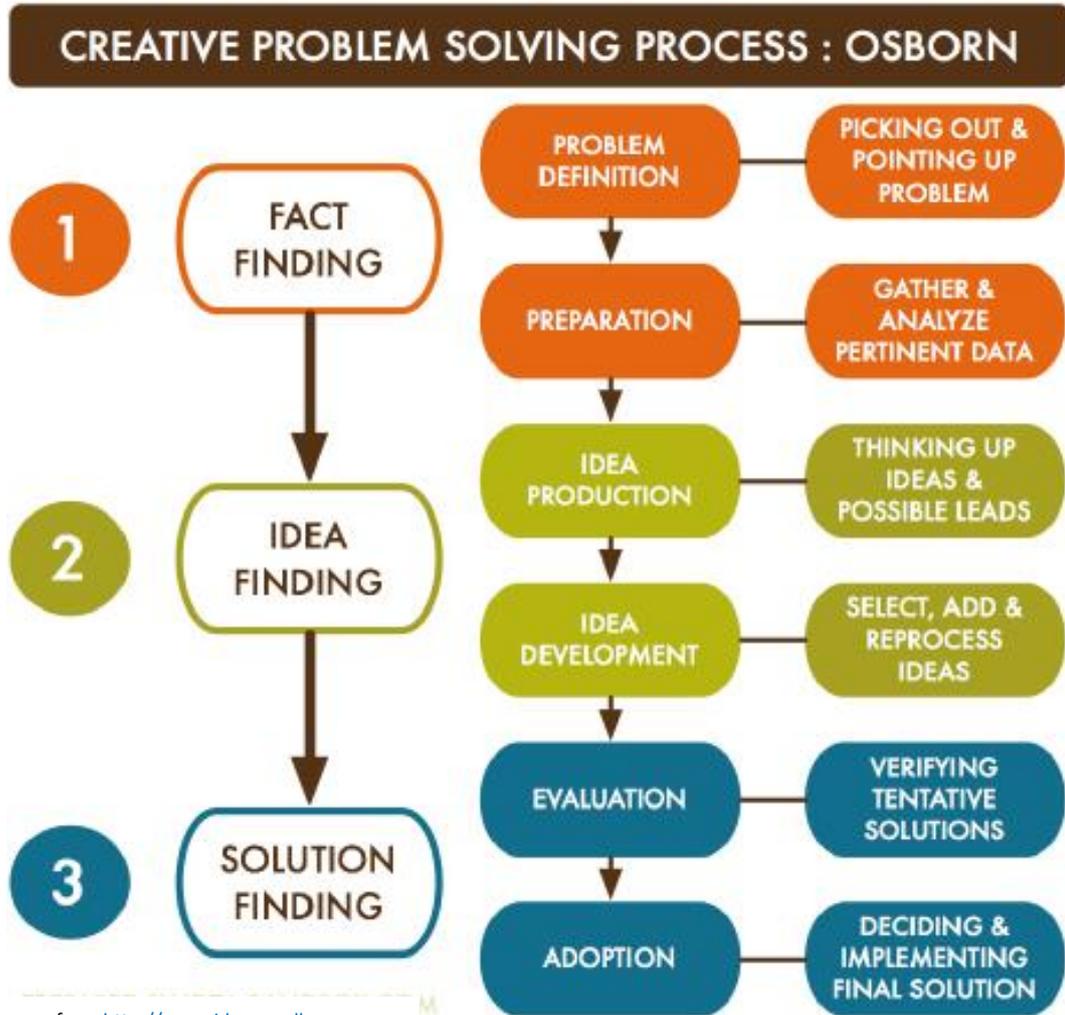


Diagram from <http://www.idea-sandbox.com>

- Show the class an everyday object, for example a fork, a screwdriver, or a potato peeler. Once they have discussed what it is used for now, have them brainstorm other uses of this object. With minor modifications what else could it be used to do?

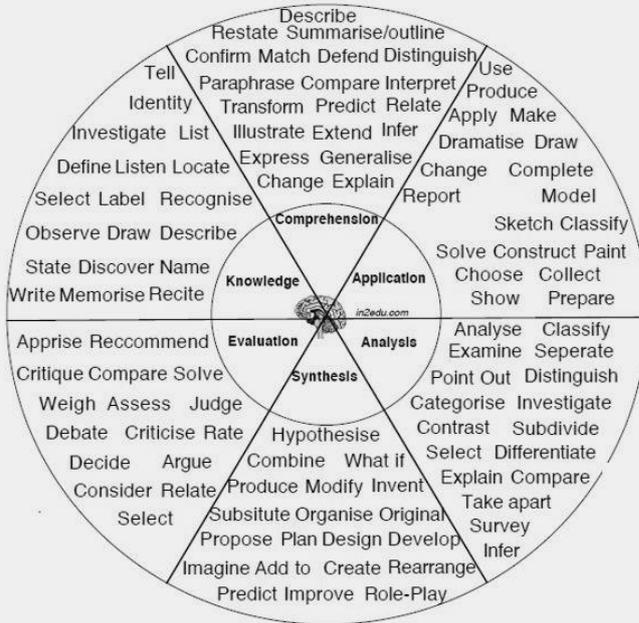
My product	What it looks like now?
My new product	The techniques I used to create it

### SCF Pilot School Case Study

#### Blooms action verbs

SCF Pilot School

Bright Riders Private School



Many teachers are familiar with the [Blooms Taxonomy Action Verbs wheel](#), but Bright Riders Private School have taken this tool one step further. They have reorganised the action verbs into the SCF competences. Teachers use the action verbs when writing their learning outcomes. They start their learning outcome with an action verb that matches the major competence they and their students are focussing on.

#### Blooms action verbs for: Creativity

e.g. By the end of this lesson students will be able to **compose** a dialogue using the poem studied.

#### Action verbs:

Visualise	Deduce	Show	Demonstrate
Imagine	Predict	Characterise	Draw
Compose	Perform	Sketch	Illustrate
Adapt	Assemble	Generate	Invent
Construct	Build	Debate	Create
Analyse	Appreciate	Respond	Value
Evaluate	Recognise	Communicate	Overcome
Use	Differentiate		

- Explore products that are similar but have different uses. For example brushes include hair brushes, paint brushes, brooms, shovel and broom sets, dishwashing brush, toothbrush. Encourage students to discuss - How are they similar? How are they different? What do you think the inventor was thinking? Students could design a brush for a specific purpose.
- Hold an “innovation show and tell” each morning for one month. Each student brings an invention to show the class and explain what it is used for, how it was built etc.

- Support children to use digital tools that build creativity. Below are some websites to assist:

- Presentation tools to demonstrate originality and inventiveness and communicate these ideas to others



Powerpoint

[www.prezi.com](http://www.prezi.com)

[www.edu.glogster.com](http://www.edu.glogster.com)

Showme App

- Design tools to support students thinking and creative ideas



[www.tuxpaint.org](http://www.tuxpaint.org)

[www.inspiration.com](http://www.inspiration.com)

- Try different apps for smart phones or tablets



[www.ipadapps4school.com](http://www.ipadapps4school.com)

Bluster

Pop math

Maths slide

Storymaker

- Support students to use these innovation models

- The SAMR model
- The CAMPER model
- The BAR model

**C**onsequences

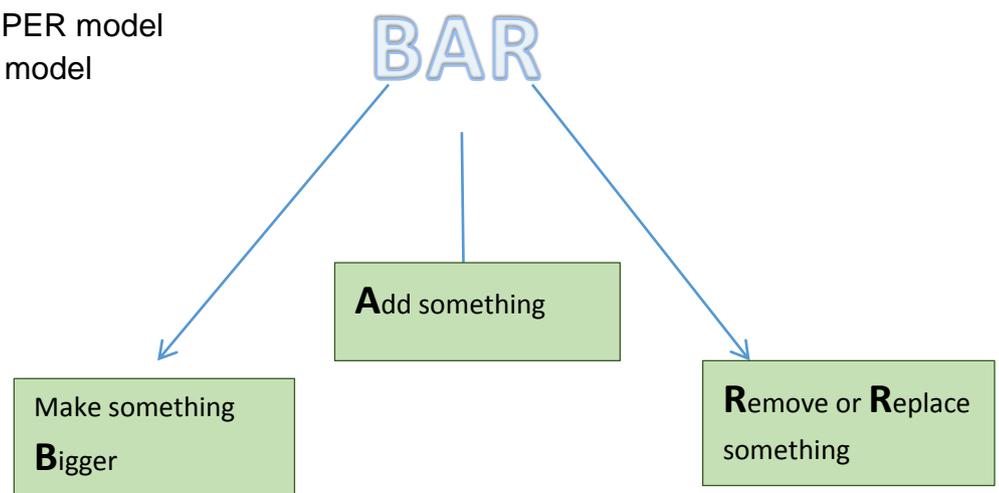
**A**ssumptions

**M**ain points

**P**rejudice

**E**vidence

**R**elevance



- Use a design brief to generate new ideas or solutions to problems

## Design brief

Who is the client?	Who is it for? (Target market)	What type of product is needed?	What must it do?	Important features or considerations

- Explore and research an invention we use everyday. Products we use every day were designed and created by an innovator. They might have designed a new product or modified an existing product.
  - Select everyday products and students explore how they impact on our lives.

### The Things We Use

	What is this used for?	Why do you think this product was developed?	How has this changed how we do things?	How might it change in the future?

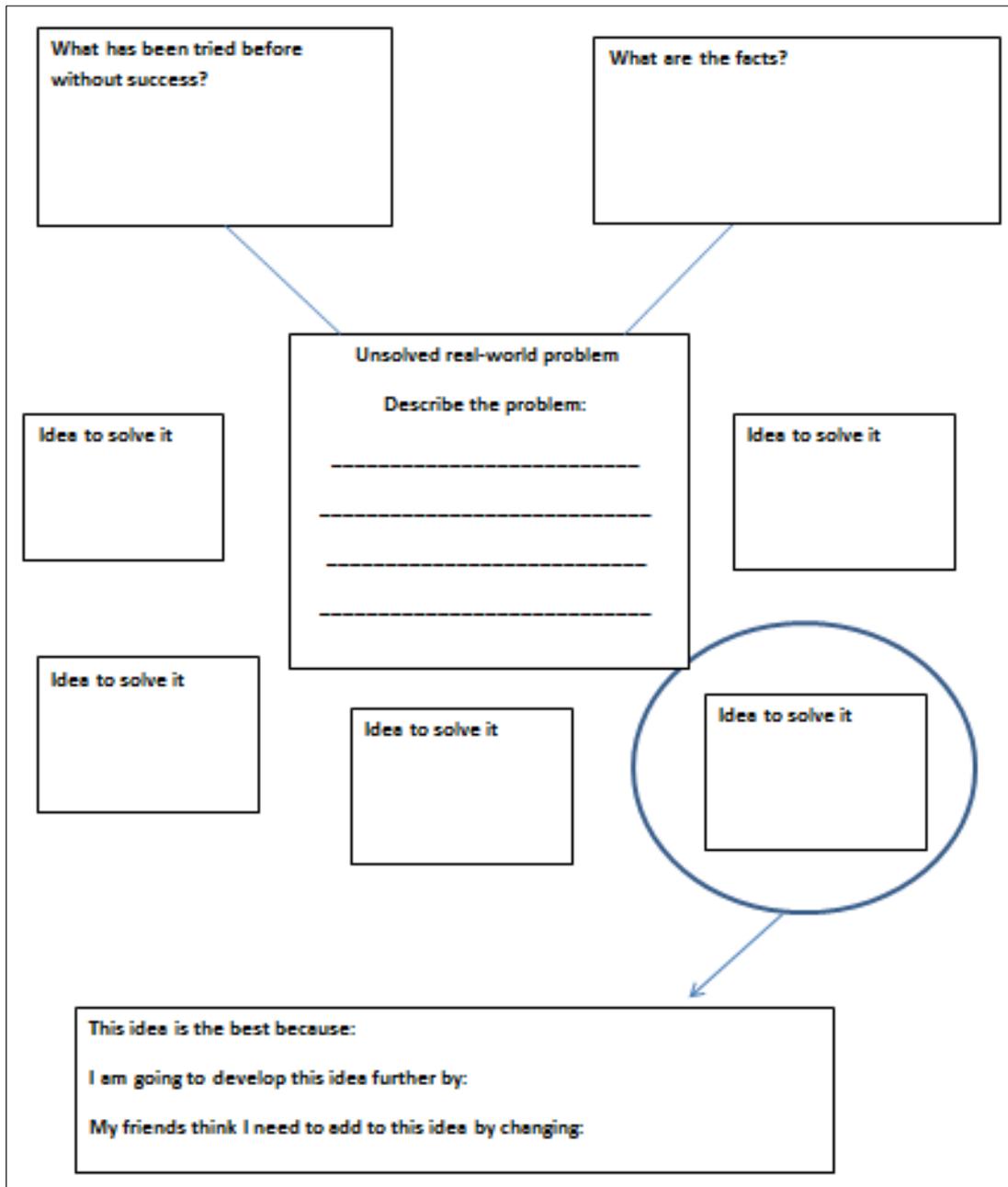
- Students then research a product that they use every day. Who invented it? When and why was it invented? How is it used? What other products led to its development?
- The Visa Evolution TV commercial highlights how everyday products we use have changed over time to make our lives easier and more comfortable. Students can identify the products in the commercial (e.g. typewriter) and explore how new products (e.g. laptop) make our lives easier. What might these products look like in 100 years?



[Visa Evolution TV commercial](#)

- Explore the lives of innovators throughout history and learn from them e.g. The Wright brothers, Steve Jobs, Benjamin Franklin, Leonardo Da Vinci. Include Emirati innovators such as His Highness Sheikh Mohammed bin Rashid Al Maktoum, Mohammed Saeed Harib, and Faisal Al Bannai.

- Support students to solve real-world unsolved problems



- Encourage students to create/find a product and sell it for a profit
- Develop an innovations wall display and have students collect newspaper clippings of new innovations to put on display.



[101 activities for teaching creativity](#)

[How can we foster imagination in the classroom?](#)

## SCF Pilot School Case Study

### Bridge building

**SCF Pilot School:**

Al Ittihad National Private  
School – Abu Dhabi

**SCF Lead Teacher**

Manal Hakim



A bridge building science unit of work has led to Grade 3 students at Al Ittihad National Private School (Abu Dhabi) developing the competence of creativity, alongside problem solving, critical thinking and collaboration / teamwork. Their teacher used the *design process* to support the students learning. Students started by looking at examples of famous bridges, talked about what problem these bridges helped solve, and discussed what makes a good bridge. Manal made sure to include Abu Dhabi bridges that students are familiar with, e.g. the Al Maqtaa Bridge, to support students in describing the problems bridges solves.

The next step was to plan their own bridges. They worked in groups to draw a design of their bridge. They had to consider the range of materials they were given. Students then built their bridge and their teacher reminded them to always remember the problem they were solving, and to check their construction back against their design.

*Test and improve* is an important part of the design process and students did this using toy cars on their bridges. This testing helped them to make changes to their bridge, and in most groups they made sure that they updated their design drawing too. During this *redesign* stage the students were supported to analyse what they did to make their bridge effective through open questions from the teacher:



*Why did you put these sticks here?  
How does this part make the bridge a better bridge?  
Why did you fold the paper?  
Why did you add two more rods?*

