

Crystal Creativity

"Some men see things as they are and say 'why?' I dream of things that never were and say, 'why not?'" George Bernard Shaw.

"Creativity is a central source of meaning in our lives ... most of the things that are interesting, important, and human are the results of creativity..." Mihaly Csikszentmihalyi

Crystal Creativity helps us to grow into critical and creative thinkers who can adapt to the constant changes in modern society.

Definition

Creativity involves transforming ideas, imagination, and dreams into reality. When being creative, we see the hidden patterns, make connections between things that aren't normally related, and come up with new ideas. We ask questions, come up with more than one solution and do not fear showing unusual thoughts.

Often creativity also happens when people are <u>not</u> actively engaged in a task. Sometimes the best ideas come after a long walk, taking a shower, playing somewhere, driving home. In the classroom then, we must allow children to "daydream" and come back to a task and carry on even after it seems finished. This chance to review is an essential element of creativity.

Caution

We must also guard against teaching un-creativity.

A creative ways by George Land took 1,600 five-year-old's and ways to be how creative they were. Nines wast percent were deemed creative; able thinking in novel ways to be age of 10, this number dropped to 20 percent, whilst by 15 years of age, it had declined to 12 percent. The same test in 280,000 add to 2 owed this level of creativity had dropped to 2%.

The conclusion is that non-creative behaviour is learnt over time.

Teaching creativity should not be **imitation**. If children create some pentical to what the teacher created, it is not creativity. Creativity requires children to do something the ferent, be adventurous and use their own unique personalities experiences, and visions.

The stages of a curriculum that supports Creativity

- Confidence in using imagination in different situations and being able to share these ideas, bringing them to life.
- > Generating ideas: creating a clear brief and making improvements to something. Being able to combine concepts. Being experimental.
- Applying creativity to other contexts through taught tools and developing the children to ask effective questions.
- > Learning to use others in the creative process.



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Crystal Creativity Characteristics

- Feed your imagination
- Learn to visualize
- Create new ideas in your head, on paper and using technology
- Build on and feed off the creativity of others
- Be both original and daring
- Be passionate
- Ask questions
- Step out of your comfort zone
- Have fun
- Make time and space to think

Created here is a framework that supports the teaching of this core value. It is a progression based on personal development and not age. Each of the developmental stages breaks into subsections making the progression easier to follow.

However, it is not a document in which children need to do each and all the activities and in the order they appear. Personal development is about moving towards being better, so this is not sequential and so teaching and focus will rightly be taken from across this framework.

See it as a resource bank, helping adults support children towards emulating the 10 essential characteristics.



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Using Imagination

Children imagine different situations and can explain what they are imagining in a range of ways

Principles and guidance:

- > children can imagine a situation and see it in their heads.
- The event may never have happened or relates to a place that does not exist.
- This may be with other people for instance when acting an event out.

- Create imaginative play situations
- Model imagination with children closing their eyes as a situation is described
- Ask children when imagining to talk about their senses in the situation
- Create role play situations in spaces with resources to support. The adult will need to model using the resources in imaginative ways and be "in role"
- Create role play situations where their imagination is the only resource
- Explore what children understand by imagination and when they have used it
- Use role play and discussion to imagine other's feelings in a situation as well as create your own.
- Mime situations/ animals/ actions and others work out what is being presented
- When reading a story stop and imagine the situations that the characters are in
- Ask children "what might happen next?" in a situation
- Join a child in the imagination if they are acting it out to support the movement of the narrative.
- Children are encouraged to design their own role play costumes using a variety of materials and reallife objects
- Posing questions related to a text such as the Three Billy Goats Gruff, how can the goats cross the river without using the bridge?
- > Children to listen to different genres of music, can they create a story around the music?
- Children are encouraged to share what they imagine with others. To do this successfully, encourage children to add a lot of detail and support them by asking questions. Support them to give context.
- Children are asked to describe how they feel in a described situation or how others would feel.
- Create situations for children to describe to each other: "what would you do if....?" Help them makes sense of what they say
- Children are given a typical scenario/ daily routine to describe, but one detail is changed so "the school hall as run out of food" or "you leave the house to come to school but turn left and not right out of the door. Where do you go?"
- > This can be imagined. "Goldilocks goes to the house of the 3 bears, but the bears are in and not out."

 "At school, all the pencils are refusing to work because they have been treated badly."
- Cleate a zone/ area/ time in the classroom where all imagination is safe such as "the imagination zone". They may have music/ lighting/ candle to support it or take place at a specific time. It could take place in all lessons, so in maths "what could the answer be?" type scenarios, or "if 12 is the answer, what could the question be?"
- In stories and story-telling times ask open ended questions. "What if...?" or "What do you think....?" In this situation, ask others if they think the same and encourage difference.



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- Drama and role play allow children to share these ideas with the wider world. Children are very familiar with this through television and film and how someone else's imagination triggers emotions in us.

 Allow them to tell you about favourite TV and then challenge the situation of the film, for instance Spiderman gets caught in his own web: discuss the emotions and discover empathy.
- Use famous are or music and discuss what emotions it generates and what emotions the artist wanted us to feel or musicate been trying to communicate. Here we are seeing the results of other's imaginations
- Encourage children to express their own imaginations through art. A quick sketch is enough to communicate how we feel or the ideas we are having. In solving problems with children, ask them to draw possible solutions.
- Demonstrate teaching ideas through diagrams for instance diagrams of the human body in science, timelines and family trees in history, routes, and maps in geography.
- > Demonstrate ideas through giving and writing instructions for actual processes a smagined ones.
- Role play in subject areas / not seating such as being Henry VIII or Amelia Earhant or Kensuke or Willy Wonka.
- > Role play playground / classroom situations that have led to conflict. The children will provide these!
- > Create short sketches and plays but allow the children to be in control of the events rather than completely retell a story that has a fixed ending. What would happen if...."
- Ask the children to create solutions to problems through diagrams so "can we make the classroom quieter" or "can the dinner hall be better arranged" or "how can we play football without falling out?"
- What invention would you invent if you could?
- > Can you create an invention that would boil and egg but meant that you didn't have to ever touch the
- > Enjoy "Wallace and Gromit" or Heath Robinson and talk about what is being done/ how it works/ can it be improved?
- Ask children to imagine how an invention in history was created and why. Pictures and diagrams can help such as early flying machine inventions or bicycles. "How do you think the Romans attached forts?"
- Hot seat characters from fiction or non-fictions books. Imagine how you would feel to be that character.



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Generating new ideas

Children can generate their own ideas once given a clear brief or description. Children can create a brief.

Principles and guidance:

- The children are asked to move on from imagination to being able to generate ideas
- The understand what a brief is and how to create a range of ideas to match it
- A brief is a problem or challenges that we need to come up with ideas to solve. It can be written or spoken, short or long. It may form or be a hook.
- A brief usually has success criteria: a brief for a cup may be in needs to hold hot and cold, not be too heavy and fit in the hand. A brief for a school trip may be how to travel they're and that all children need to go at once and need to take iPads. The success criteria allow us to focus on the problem clearly.

- When solving a brief, encourage children to come up with as many possible solutions. The first idea is unlikely to be the best.
- This requires editing and improving: a piece of writing is given a specific brief of being scary and children will need to create several sentence ideas before settling on the most effective. Often the most effective will link back to grammar choices that have been demonstrated in the model text.
- A maths problem may lead to lots of solutions, so the brief may be to find more than one way or to find the most efficient way or to find a way that only uses models and images rather than numbers.
- Allow a brief brainstorm, even if this leads to things that are not possible. In Science, the question "what are all the things that may affect the speed of the ice melting" may lead the children to want to apply extreme heat that is not possible in a classroom.
- The teacher needs to model a brief and how to think about success criteria. These can be imaginative themselves so "you are to design a new way to travel underwater." The success criteria would be "waterproof, a whole family must fit in, and it must not scare fish!"
- Create restraints in a piece of writing: so, it must be less than 50 words, or you must have a female heroine, or the story must have a timeslip in it or it must include a familiar character from another story. (Consider the Shrek movies)
- > Ask children to produce their own success criteria for a piece of art or music for instance.
- Always encourage lots of ideas to solve open problems and allow them to narrow them down. For instance, in an IT presentation, they may want to record several ways of it looking before making a choice and talking with each other about the choice.
- In PE, the team create a strategy to beat the opposition within the success criteria of the rules. They play and then adapt their approach if it was unsuccessful.
- Close the story book before the ending and ask the children to design their own story endings
- > Children are asked to create their own success criteria based on a framework: what is it trying to do? What will it do well? What could the thing start to do better? Which improvements could we make that would really make a difference?
- Have the children think of now to improve a situation (e.g., playtime, the length of the dinner queue) or fix something that does not work well.



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- Take a moder or a product that the children are really used to such as an APP. How could it be improved what could we have done to make that writing or lesson better? Can this change the next lesson?
- > Once a problem is identified, model the creation of the success criteria in the first instance.
- Show how to take those ideas off the possible solutions and give reasons for it e.g., that is not possible because it will be too expensive, or we do not have the skills to do it now.
- Remaining solutions may be good but may have an adverse effect somewhere else or on something. So, what would be the impact of that playt me solution, or in needing an iPad each or in needing a lot of paint?
- Allow children then to scaffold/ plan and create diagrams in for now to solve the problem.
- > Can the children solve a regular problem at home through a comework activity?
- > Teachers need to avoid telling children how to do something to soon
- The children learn how to combine ideas to generate new ideas through having it modelled. This may start with a big concept such as redesigning part of the school building or creating a space within the classroom for quiet reflection.
- In an LE this may be a large Hook such as "we are going to open a museum" or "you are going to write a book that will be sold in a book shop"
- Design the LE with the children. Create the success criteria with the children. The children share their ideas through discussion and the teacher helps pick component parts that will lead to meeting the success criteria. Importantly put all suggestions up in the first instance.
- It can be a much smaller task such as design a new school bag.
- Combine the characteristics of two characters in a book. What would happen in the story if they were the same character, or if this character was more like that one?
- In other areas, change the parameters so in history: How might England have been different if the Romans had not invaded. In Geography, how might Brix ham be different if the sea rose by, I metre? In Art, what might it have been like if this artist had not used the black so much?
- Ask children to imagine the future, maybe a futuristic classroom. What would it look it? What would it include?
- Imagine being an explorer you have travelled here. What can you see, hear, smell etc. (yr. 2 explorers history topic).
 - Play story making games in circle, children say next part of story only one sentence at a time. (Also requires teamwork).
- Use hook item such as a bean (year 1 science plants). Having read Jack in the bean stalk what might our bean grow into? Create stories or pictures or act out what they see.



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Turning ideas into actions or products

Children can be creative across in a range of subjects by using a range of taught tools.

Principles and guidance:

- Creativity is not just about Art or performance. It is necessary when creating anything new from science, to writing to engineering.
- Creative problem solving is necessary in maths as it help sees patterns and identifies trends
- Creative thinking requires tools to help support it as these allow wider solutions to be found.
- Creativity requires more than one go! All things require development and improvement linked back to the right questions having been asked. Ideas are refined and improved.
- Creative solutions may depend on perspective and may require compromise.

- The teacher should demonstrate why creativity is important and when they are creative (e.g., Lesson planning, learning from other teachers, using a resource such as numicon in a different way.
- Ask children to consider what the future may be like: this is a long time away and it is also tomorrow. In PHSE, how might we do things differently or in environmental science, what do we need to start to achieve or in school, how can we act differently?
- Children learning to code to solve problems.
- Children make predictions in science
- Children imagine places in geography that they have not visited
- When talking with an adult about their job, can children write down as many ways as possible that that adult needs to be creative in their job (e.g., people who help us, or a visiting priest)
- Ask children to articulate when that have been creative and reward this, especially in subjects that it is not always obvious.
- Children speak to families about when the family needs to be creative such as hobbies, making home improvements, organizing a holiday, creating a meal with limited ingredients.
- When are children most creative? Do they need time/thinking time/a walk or a bath and this helps calm the mind and see the solution more clearly?
- Can children think of times when being creative has helped in another role e.g., finding a solution to getting to school on their own means that they are healthier?
- Children to use instruments whilst listening to a story, imagining the sound of the different events/characters etc. and recreating this with music, for example when the goats trip-trap over the bridge and the gingerbread man running from the cow
- Though team building activities Sharing creative ideas to build paper bridges, spaghetti, and marshmallow towers etc. to be able to hold a certain weight or the most weight or how to cross the crocodile river with your whole team but not touch the water (grass).
- Explore the use of mind mapping: a single theme/ question in the middle; ideas that fan out; lines that connect the ideas; arrows that come from an idea to a new one. Mind maps are simple tools that are easily understood, shareable, and quick to produce.

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- Use mind maps to record information such as the impact of the rainforests, how characters in a storage related, how a theme runs through a poem, how a team sport is played.
- Ask children to do a mind map of what they know about an area of learning before they begin and then add in another colours the same information after the learning. This can be used as formative assessment.
- > Explore other concept mapping techniques that may add greater clarity depending on the situation.
- Create a mind map for exploring other problems that are more creative: how to solve climate change? What could we do to improve the classroom? What are the themes in these books by the same authors? Do books on the same subject have the same themes?
- > Show children the difference between closed and open-ended questions.
- When solving a problem that hasn't been fixed, refer to the success criteria and ask open ended questions. Does this idea fit the brief? What could make it better? How could that work? Will others support that idea? Is this the best that I can do?
- Show children how ideas have changed (e.g., the evolution of the car) and tell inspiring stories about perseverance such as Edison's invention of the lightbulb.
- Talk about change in our own lifetimes that seem strange now, such as the invention of the mobile phone. Ask children to do a concept map of where we could be in 40 years' time if this has been achieved in the last 40?
- As children mind map to solve a problem and ask their peers to ask only open-ended questions.

 Ask children to always plan and redraft work and present the best only. Ask peers to help improve it
- > Children re design the packaging of their favorite product. Or the front cover of their favorite book.
- Show that different perspectives may be necessary: can children share a plan to consider other people's views of it. Will different people think different things: for instance, should we change the school day length will have different answers depending on who is asked.
- In a group exercise, discuss the need for compromise. This may mean that children need to see the need for priorities: which solution matches in with the success criteria the most.
- Discuss and share perspective in relation to characters (real or imagined), such as the Spanish view of Drake or the chickens view of Fantastic Mr. Fox.
- In talking about geographical issues, such as town planning or building a dam, ask the children to think of perspectives and (if possible) where compromise may be needed.



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Learning to use others to support the Creative process.

Understanding how others will impact on the creative process and how to make the most of this opportunity. This step also requires a cross over with teamwork as a school value.

Principles and guidance:

Creative solutions may depend on perspective and may require compromise.

- > Show that different perspectives may be necessary, can children share a plan to consider other people's views of it. Will different people think different things: for instance, should we change the school day length will have different answers depending on who is asked.
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- Discuss and share perspective in relation to characters (real or imagined), such as the Spanish view of Drake or the chickens view of Fantastic Mr. Fox.
- In talking about geographical issues, such as town planning or building a dam, ask the children to think of perspectives and (if possible) where compromise may be needed.
- The children consider the role of group work before a group task begins and discuss what the issues may be around this (getting to a consensus too quickly may mean the best solution has not been found; how to get to consensus; how to get all perspectives; can everyone feel that they contribute without feeling challenged or at risk)
- Create a set of rules for the work based on the reminders of what creativity strategies have already been learnt. This will allow a secure group who know what is to be achieved based on secure success ladder.
- Make a presentation collaboratively using, for example, Sway. Children would need to work creatively together to discuss and compromise what it should include and how it might look.

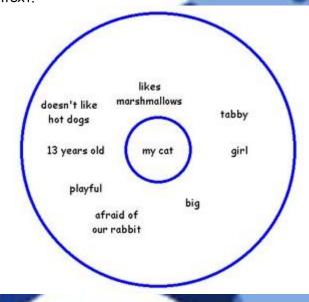


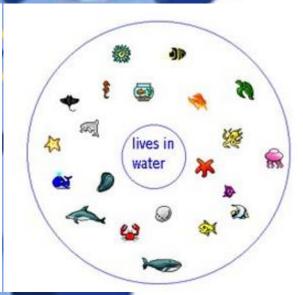
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Append

Circle Map

Circle Maps are tools used to help define a thing or idea. It is used to brainstorm ideas and for showing prior knowledge about a topic. In the centre of the circle, use words, numbers, pictures, or any other sign or symbol to represent the object, person, or idea you are trying to understand or define. In the outside circle, write or draw any information that puts this thing in context.





Great for not just science but to build characters for stories - adding adjectives to central character.

Bubble Map

Bubble Maps are used to describe qualities using adjectives ("sparkle words") and adjective phrases. As a writing tool it enriches students' abilities to identify qualities and use descriptive words. In the centre circle, write the word or thing being described. Write the adjectives or adjective phrases in the outside circles.



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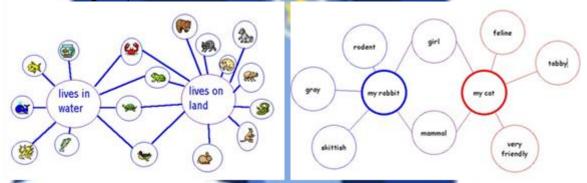


Possible Uses: Describe a friend, a pet, favourite candy, a game, a stuffed animal.

Double Bubble Map

When comparing and contrasting, we use Double Bubble Maps. This is similar in concept to a Venn diagram. Two items being compared are written in the two centre circles.

Outside bubbles show items that share qualities with only one object - these are contrasting qualities. Centre bubbles (that connect to both circles) show similarities between the two items being compared.



Possible Uses: Compare and contrast you and your best friend or Mum/Dad, your favourite and least favourite food, characters in a book, two of your teachers, old school and new school.

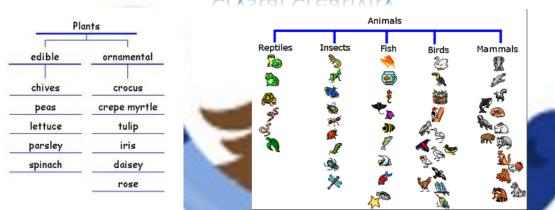
Tree Map

For classifying and grouping, students learn to use a Tree Map. Things or ideas are sorted into categories or groups. Sometimes new categories are created. On the top line, write the category name. Below that begin writing sub-categories. Below each sub-category write specific members of the group. Some things can go in multiple groups.

Tree Maps are good for studying for tests. Use this map to categorize spelling words according to the skill being taught. Try using a Tree Map when studying Social Studies or Science.



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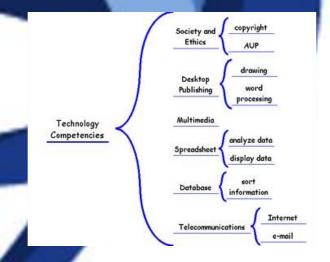
Possible Uses: Categorize spelling words when studying for a test, write a shopping list for the grocery store organized by type of food (i.e., produce, dairy, canned goods, treats, etc.).

Brace Map

Brace Maps help learners understand the relationship between a whole physical object and its parts. They are used to analyse the structure of an item. It is like 'dissecting' on paper.

On the line to the left, print the name of the whole object. On the lines within the first brace to the right, write the major parts of the object, then follow within the next set of braces with the subparts of each major part.

Tree Maps are good for organizing the agenda of a meeting or showing the structure of an organization.



Possible Uses: Think about (map out) the parts of a plant, a computer, a continent, country, or state, a unit of measurement.

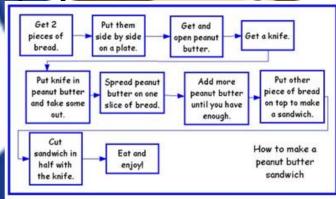
Flow Map



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Flow Maps sequence and order a process. They identify the relationships between stages and substages of an event (or order or numbers, operations, steps, etc.) They can be used to explain the order of events.

In the outside rectangle, print the name for the event or sequence. Rectangles to follow list the steps or events that follow from beginning to end. Smaller rectangles may be written below to list substages or each major stage.



Possible Uses: Write a flow map at home is good practice for students to think logically and completely. Have your child make a Flow Map explaining how to make a bed, wash the dishes, make cookies, or tie a shoe. It is fun to give the directions to someone else and see if they can follow them. This is also good practice for recalling the order of events in a story - helpful review before an AR quiz!

Multi-Flow Maps

Cause and effect are represented in a Multi-Flow Map. It is a process of sequencing that looks at what caused an event and the results/effects of the event. It helps students analyse a situation by looking at the cause and effect - the 'why' and 'consequences' - good or bad. In the centre rectangle, list the event that occurred. In the rectangle to the left, list the causes of the event. Write the effects/consequences of the event in the rectangles to the right of the centre rectangle. If you are studying a system, you will find that there are effects in the system which, in turn, influences initial causes. This circular cause and effect relationship is called a feedback loop.



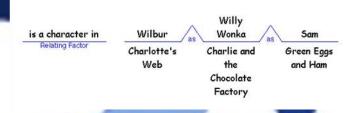
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Possible Uses: Conflicts between friends or siblings could be analysed using a Multi-Flow Map. Pick a hypothetical situation and make two Multi-Flow Maps - one with good consequences and one with adverse consequences. Map the rain cycle, the life cycle of an animal or plant.

Bridge Map®

Seeing analogies is the process of identifying similarities between relationships. These are similar to the 'analogies' found on SATs with one difference being Bridge Maps can have many 'bridges'. Bridge Maps give students a tool for applying the process of seeing analogies. On the far left, write in the relating factor. The relating factor is the similar phrase that fits both sides of an analogy. On the top and bottom of the left side of the bridge, write in the first pair of things that have this relationship. On the right side of the bridge, write in the second pair of things that have the same relationship. The bridge can continue with more relating factors.



Possible Uses: spelling words, habitats or primary food sources for animals, makes and models of cars.