

The Creativity Controversy

How and why we must teach Creativity

Can schools teach creativity? The question has been hotly debated for many years. 'Creativity' is now the new educational buzzword, perhaps even overtaking 'resilience' in the semantic repertoire of every reflective teacher.

The late Ken Robinson's 2006 TED talk, 'Do Schools Kill Creativity?', with its 65 million views and inspiring call to change, established a new framework for reconsidering the educational priorities of our time. More recent voices have added more weight to the groundswell for new thinking about how schools nurture, or indeed negate, the natural creativity of young people.

Bill Lucas and Ellen Spencer's book *Teaching Creative Thinking* makes the case for creativity being 'at the heart of the formal and informal experiences of school'. Yet, amidst the flurry of excitement and the rush of new initiatives to prioritise creativity in the classroom, George Coles' recent TES article, 'We're Wrong to Teach Creativity, Here's Why', sounded a resounding note of caution: 'teaching for creativity's sake is futile.' Instead, Coles champions 'foundational knowledge, structure and routine' as the solid basis for high quality learning: 'lightbulb moments don't come out of thin air.'

The debate centres on an important crux: creativity as spontaneous artistic endeavour (in the Romantic tradition of Wordsworth et al) and creative thinking as the most valuable 'soft skill' for every young person in the modern world. Forbes claimed last year that there are five major 'soft skills' that lead to career success, with creativity topping the list. Now PISA has announced that it will assess creative thinking for the first time in their global educational rankings from 2022.

Ultimately, creative thinking can and must be taught – this is a moral and educational imperative for all schools.

Over the past two years at King's High Warwick, we have designed and trialled a Certificate in Creative Thinking for Year 10 students. Our experiences are very clear: creativity can be learned, practised, honed, and indeed assessed. The Certificate involves students choosing a real-world problem, conducting structured research into it, and then thinking creatively about how the problem might be solved. Discussions are now underway with the New College of the Humanities about the possibility of accrediting the course and for schools to deliver this nationally and globally.

Our experience has shown that a carefully scaffolded and structured approach to the teaching of creative thinking is the key to success. Here are some examples of this.

1. USE X TO SOLVE Y

When we started using this formula in the teaching of our Certificate, it was a huge breakthrough. Y represents the chosen problem area, and X the way in which the students will solve it. For instance, I will use greenhouse architecture to create a wellbeing restaurant set in an indoor garden, or We will use biological research to design a human that could live for 200 years. When students use the formula in this way, they are immediately invited to think about how they will apply research when solving their problem, rather than having to conjure up ideas out of nowhere. Rather than 'blue sky thinking', which can lack structure and feel dauntingly open-ended, this is a grounded, knowledge-based approach to the generation of ideas.

2. MORPHOLOGICAL ANALYSIS

This sounds more complex than it is, and essentially involves students splurging (to use the technical term) as many ideas as they can into a table:

OBJECT	IDEA 1	IDEA 2	IDEA 3	IDEA 4
SUBFUNCTION 1				
SUBFUNCTION 2				
SUBFUNCTION 3				
SUBFUNCTION 4				

For example, if you wanted students to use morphological analysis to think creatively about car design, you could share this modified version of the table with them:

CAR	IDEA 1	IDEA 2	IDEA 3	IDEA 4
Maintain comfortable temperature	Fan Heater			
Provide entertainment	Sound System			
Prevent Crash	Brake Lights			

'Subfunctions', as you can see, are simply specific things that an object does. Hand the table above to a student, point out that the 'Idea 1' column is dull and predictable, and encourage them to be much more interesting and innovative than you have been. Quarter of an hour later you might get something like the following back:

CAR	IDEA 1	IDEA 2	IDEA 3	IDEA 4
Maintain comfortable temperature	Fan Heater	Automatic woolly hat dispenser	Ice dispenser	Heated clothing linked to car temperature/car controls
Provide entertainment	Sound System	Virtual reality in car windows	Passenger exercise? Pedals for reclined cycling?	Massage system
Prevent Crash	Brake Lights	Magnets so cars can't touch	Automated stilts when crash is sensed	Car speed limited linked to speed

Once ideas like these have been splurged, a process of quality control can take place. Which ideas are realistic, useful, innovative? When you think about individual ideas in more detail, do they spark further ideas or alternatives? The advantage of this method is that it takes the pressure off having 'good ideas' first time round, and embeds the idea that you will very likely fail (some ideas will be bad) along the way.

THE CHALLENGE

The challenge for anyone trying to teach creative thinking in a truly effective way is providing students with the structure and scaffolding to think creatively and hone and sharpen their creative ideas. Without the structure and scaffolding, students will inevitably struggle to come up with their 'lightbulb moment'. But, it is utterly clear to us that teaching creative thinking has huge benefits.

Those thinkers who have sounded notes of caution about placing creativity at the centre of education have tended to frame the debate as a zero sum game, pitting a knowledge-rich curriculum against one that enables the free flow of ideas. Our experience of teaching the Certificate makes clear that this polarity is, quite simply, unnecessary. When students know in advance that their knowledge will be put to creative use, motivation and, therefore, depth of learning rise. Similarly, the process of generating ideas liberates students from the Gradgrindian task of memorising information because it 'might be useful for the test', and enables them to use their knowledge in a memorable and enjoyable way.

Creativity is not about coming up with an idea out of thin air. It's about invaluable real-world skills that will help young people flourish in a world dominated by Artificial Intelligence. It's about vital 'soft skills' such as problem solving, teamwork, critical thinking and resilience, to name just a few. Ultimately, it's about a foundational intellectual disposition that must be front and centre of any truly valuable and enriching education.

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