Although businesses today urgently need people who can cope with and contribute to the breathless rate of economic, technological, and ecological change, Sir Ken Robinson, author of Out Of Our Minds: Learning to be Creative, thinks that schools are failing adequately to equip children with the qualities they need to do so.

'There is another crisis today in addition to the climate crisis,' he says. 'It's a crisis of human resources, and in particular a failure to tap the full potential of human creativity and imagination. There are major problems facing all organisations in recruiting and retaining people with creative abilities, powers of communication and adaptability. Although young people have these qualities in abundance, by the time they emerge from formal education many of them do not.'

'The decline in divergent thinking'

'Ve have seen that young people lose their ability to think in divergent or non-linear ways as they get older. Divergent thinking is defined by the ability to generate many, or more complex or complicated, ideas from an original idea, and then to elaborate upon those ideas. It is a key component of creativity.'

More than a decade ago, in their book Breathing and Beyond: Mastering the Future Today, George Land, a world-renowned general systems scientist, and Beth Jarman

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ROBOTIC CHILDREN

Our conveyor-belt education system is geared towards the production of clones and parrots, not imaginative, creative and curious human beings. Is it any wonder our children are stressed and unhappy? Nick Netts reports
recorded research on divergent thinking that they had carried out over a series of years. Of 1,000 children, aged three to five, who were tested, 98 per cent showed they could think in divergent ways. By the time they were aged eight to 10, 32 per cent could think divergently. When the same test was applied to children aged 13 to 15 years old, only 10 per cent could think in this way. And when the test was used on 200,000 16-year-olds, only 2 per cent could think divergently.

The reason for this, according to Guy Claxton, professor of Learning Science at Bristol University and author of What’s the Point of School? (published this month by OneWorld), is that school is — at worst — a protracted apprenticeship in passivity, uncritical thought and recapitulation.

“You can get good results by spoon-feeding, but you don’t get creative, independent minds,” he says. “There’s no evidence that learning to solve simultaneous equations prepares you for the uncertain and difficulty of real life. But we blunder on in the vain hope that somehow it will.”

We don’t need no education

Indeed, if we are to believe the media reports of teenage gangs, binge-drinking, drug-taking and pregnancy, children have enough problems dealing with the present, let alone the harsh reality they may face in the future.

“Many young people today are exhibiting the signs of stress, which they act out in destructive and/or self-destructive ways,” says Claxton. “People’s ‘do’ stress when they don’t feel they have the resources to meet the demands of an uncertain world; but instead of school helping youngsters to develop those resources, like a vicious circle they increasingly see education as yet another set of demands they have to meet.”

Clearly, it’s time for leaders and managers to steer the awareness community in the right direction is not the only purpose of schools, but at Maurice Holt, emeritus professor of Education at the University of Colorado at Denver, says in his 2002 article, it’s time to start the Slow School Movement, the purpose of education should essentially be about equipping children with the ability to act responsibly in a complex society.

Richard Gerver, an award-winning primary school headmaster at Grange Primary School, Derbyshire, agrees. “We have to re-engage with the essential purpose of education and question its underlying moral imperative,” he
Open to examination

English pupils now face 76 standardised exams in their school career. This reflects a broader shift in our attitude to children. Today, we find it’s simply to let them play and learn through curiosity and imagination and problem-solving. Instead, we’ve focused on exams, schools find ways to massage exam results, eventually, when the pressure for top grades becomes all-consuming, exams lose their currency. A level grade inflation has made it so hard to distinguish between pupils that Imperial College recently junked its own entrance exam.

For pupils, exams are a blunt instrument. What they measure best is how good you are at sitting exams. The New Economy needs nimble-minded innovators who can think across disciplines and relish the challenge of learning throughout their lives. These are the people that will create the next Google, invent an alternative fuel or devise a plan to stay poverty in Africa... Making a list of exam scores encourages pupils to serve up pre-picked answers to tick the box instead of thinking outside it.

True learning defies tests, targets and timescales. Its fluid, unpredictable and friendly hard to measure. It is also rich, potent and exhilarating. One way to bring that into our classrooms is to accept that much of the hard learning cannot be reduced to a formula. As Einstein said: ‘Not everything that can be counted counts, and not everything that counts can be counted.”

Across the far east, states are trimming the academic workload, loosening up curricula to foster creative thinking and putting less emphasis on test scores, says a former education minister of Singapore. ‘If we stick only with the national exams as a means of measuring children’s... is transparent and simple, but it will tend to

narrow our definition of talent and is, I will resist the temptation to narrow our definition of success... Finnlan has one of the highest university graduation rates in the world and a dynamic economy. Apart from this, it shows teachers the same trust: it trains them rigorously and then leaves them alone to get on with the job. Other, then focusing them to quantify their every move.

Perhaps the tide is shifting in Britain, too. Wales has already scrapped standardised exams for children aged 17 and made them optional for those of 11 and 14. Scotland also uses tests more sparingly. By 2020, England’s exams may take a hard lower exams in their real two years. Many schools are now casting off the National Curriculum altogether. At St John’s School and Community College, a state secondary school, pupils spread a single theme across every subject at the same time. During the ‘Seine 50’ or, for instance, they might study ‘Fresh’ in Maths, The environmental impact of agriculture in science and the travelling worlds of Paul Theroux in English. Testing is kept to a minimum: But in this, the real revolution is that children have the time to relax, Teachers ensure a class covers key concepts, but the pupils decide how to explore them, writing their own curriculums as they go. Exams are not all bad – they focus minds and spur everyone to work harder, but they should not be the driving force in the classroom. We need an education system with the confidence to let learning happen, without quizzing and structuring everything to train teachers with the same rigour and leave them to it, and reinvent our schools so the exam is no longer an end in itself. The bottom line is that children feel best when they have the freedom to take chances, to unleash their curiosity, to take charge of their own learning.

Carls Hanried is a journalist and author of Under Pressure: Rescuing Our Children from the Culture of Hyper-Parenting (Harper One).

says, ‘We have to move beyond framing the discussion as a matter of how many exams a child has, and ask the question, ‘What if children were like people, as human beings, when they leave school? – and having established that, what do in the process of education to achieve that?’

Reframing the role of the arts. Obviously, it’s important not to dismiss the value of the verbal and mathematical reasoning central to academic life today. As key drivers of the Industrial Revolution, one can argue that their benefits to society at large have been immeasurable. By the same token, it’s arguable that we won’t work out how to solve the environmental costs of the Industrial Revolution if we continue to enclose those faculties with the totality of human intelligence. As an index of human potential, current leading-edge research into the brain points towards a far more diverse, human intelligence then previously suggested by the notion of the intelligence quotient (IQ). American psychologist Howard Gardner’s multiple-intelligence theory, for example, broadens the concept of intelligence to acknowledge behaviours and skills that would otherwise be called ‘abilities’, so reflective of the different ways people think and learn. His schematic of eight different types of intelligence includes naturalistic intelligence (nurturing and relating to information in one’s natural surroundings) and bodily-kinesthetic (the intelligence deployed in activities that utilise movement: sport, dance, acting, building and making things). Hardly the stuff that will get you into Mensa.

If we want to create an education system that creates citizens whose curiosity extends beyond the next episode of their favourite TV
The ability of music to open the mind and utilise both hemispheres of the brain is directly relevant to numeracy and literacy.

The very word "holistic" connotes a sense of wholeness and completeness, suggesting that all parts of a system are interconnected and interdependent. In this context, it refers to the idea that education should be comprehensive and encompassing, rather than fragmented and compartmentalised. By embracing a holistic approach, education can foster a more integrated and balanced development of students, allowing them to explore various aspects of their creativity, critical thinking, and emotional intelligence.

In practice, this means reimagining the curriculum to include a wider range of subjects and activities that support the holistic development of children. It involves integrating arts, music, drama, and other creative pursuits alongside academic subjects, ensuring that students have the opportunity to engage with a diverse array of experiences. This approach not only enhances students' cognitive capabilities but also contributes to their social and emotional well-being, promoting a more well-rounded and fulfilling educational journey.

By fostering a holistic approach to education, we can create a learning environment that is not just about acquiring knowledge but also about developing the whole child. This perspective encourages educators to consider the unique needs and potential of each student, tailoring the educational experience to meet their individual growth and development needs. In doing so, we can help create a more inclusive and effective educational system that prepares students for the challenges of the future and equips them with the skills, knowledge, and values necessary for success in their personal and professional lives.
With its emphasis on the role of the imagination in learning, sensitivity to the emotional development of the child and an overarching goal to provide children with the basis to become free, moral and integrated individuals, you might think the Steiner-Waldorf pedagogy has finally come of age, or that the modern world had finally come round to what Rudolf Steiner was saying 90 years ago. Today, there are more than 1,000 schools worldwide, and this month the Hereford Waldorf School is set to become the Hereford Steiner Academy – the first state-funded Steiner-Waldorf school in the UK.

Christopher Clouder, CEO of the European Council of Waldorf Schools and director of the UK Waldorf Schools Fellowship, says: ‘We’re finding that the ideas we’ve espoused for decades, such as the central role of play in early learning, social emotional learning, a responsible attitude to the natural environment and the importance of art and craft activities, are becoming more mainstream. We don’t feel we have all the answers, but certainly feel that what we offer is beneficial to more children than simply those that attend our schools.’

Indeed, the manual skills that crafts such as weaving and blacksmithing offer may become increasingly in demand in the future. The fact that children in mainstream schools don’t learn skills such as these orhelleinforces our over-reliance on technology, and reduces the likelihood that they will learn to repair and maintain things. Not only that, these children will also miss out on the role such activities can play in the development of the brain.

A recent report, commissioned by the Ruskin Hill Educational Trust, says the skills encouraged by arts and crafts do more than simply stimulate the part of the brain that controls movement. The report’s author, Dr Arie Sigman, says without arts and crafts children will miss an important part of cognitive development. ‘The hands are particularly sensitive to perceiving and transmitting exceedingly sophisticated information to the learning brain through sensation and movement’, he says. ‘Using their hands simply makes children more intelligent’. So, less time holding a mouse in their hands and more with a screwdriver or chisel?

Graasrootse change

We must beware, however, of creating a one-size-fits-all pedagogy – even those with a higher ethical agenda, such as Waldorf Schools – at the expense of promoting diversity. Not everyone wants the same thing for their children, and while it may gill exponents of different pedagogies to admit it, parents should be free to choose what they want for their children.

Sir Ken Robinson believes we need to move beyond the obsession with tinkering with the curriculum and standards (both of which have preoccupied successive governments for 30 years) and instead create a diversity of schools that are able to meet similar standards, but in their own ways. ‘The catering profession offers a powerful metaphor here’, he says. ‘In the catering sector there are two models of quality control. One is standardisation, which is what drives the fast food industry. No matter which outlet you go to, you know exactly what you’re going to get. The other model is the Michelin Guide. The guide sets out the characteristics of great restaurants, but they don’t tell them how to reach those standards. They do it in their own way, at a local level. The result is that every restaurant is different, and all great’.

Guy Claxton believes this diversity can be created by offering teachers more flexibility about the style in which they deliver a subject. His ‘Building Learning Power’ programme for teachers is being used at more than 1,000 schools throughout the UK, helping children to be more resilient (being able to focus on learning when learning becomes difficult, and staying engaged despite distractions), resourceful (being able to use a range of strategies to maximise learning), reflective (being able to take responsibility for organising and planning learning) and reciprocal (being able to work alone or share ideas in group work).

Sam Freedman, head of the Education Unit at think-tank Policy Exchange, believes we can create more diversity in mainstream education by expanding the range of outside providers. Many people will assume this will play into the hands of big businesses, but there are many outside providers offering new innovative approaches to education, like Sweden’s Kunskapskolon, which offers a more personalised education to children who are empowered to identify their own goals, he says. ‘Opening up to other suppliers offering different pedagogies, like Steiner-Waldorf and Montessori, would also further enrich the national curriculum.’

Can we really wait for central policy to catch up with current thinking, though? There’s no doubt we should keep lobbying, but in the meantime we can begin by creating educational projects at grassroots level right now. And it’s at the grassroots level that really exciting things are happening, inspired by a range of views and ideas, including the Reggio Emilia pedagogy, which offers children some control over the direction of their learning.

Matt Golkinan, founder of the US-based Blue Man Group, recently set up an independent
school in New York, called the Blue Man Creativity Center. He says: ‘Our educational model comprises six Areas of Connection, which describes our approach and the key elements we want to “connect” to the subjects in our curriculum. Each of these areas relates in some way to the idea of connection, whether it be the connection to a community, to one’s emotions, to one’s artistic voice, to one’s body, to the world, to one’s interests or to one’s sense of joy and wonder. Our model emerged out of a desire to achieve a new kind of balance between academic rigour and academic enrichment. We believe that both are essential attributes of a truly exceptional education.’

Learning for the planet
In the Ardèche region of France, Sophie Rabhi, daughter of famous French environmentalist Pierre Rabhi, runs L’école à la Ferme, open since September 1999. The school follows a pedagogy that embraces the child-centred educational ideas of Maria Montessori and the methods of non-violent communication formulated by Marshall Rosenberg. More recently, a project has been undertaken to

situate the school amid a group of retirement homes, and so encourage the connection of young and old within the community.

In Bali, the Green School, which opens this month, offers a vision of a school its founders say will create inspired thinkers and creative problem-solvers, knowledgeable about all aspects of life and capable of leading a changing and challenging world. The school aims to offer the same holistic educational approach of Steiner-Waldorf, coupled with Howard Gardner’s idea of multiple intelligences, to create a fertile environment for a wide-variety of learning styles. Its students will know about everything from organic gardening to website design, from running a small business to offsetting carbon emissions.

If we do not reconsider the role education plays in society, then from the viewpoint of the environment there’s a lot at stake. Leaving the education system joined at the hip to a deeply flawed economic system is not an option while that system fails to embrace the triple-bottom line, or planet, people and profit.

The notion of sustainability implies there being enough people to carry through change. Unless we nurture the current and future generations of children to engage with society in new ways, any changes we collectively make to address the environmental imperative will be short-lived. We must be willing to draw on the full range of human intelligence in service of creating a better life for all. Only a more diverse, creative education can do that.

Nick Kettles is a freelance writer and consultant to small businesses seeking to express better their unique contribution to world peace and sustainability.

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