

Educating for creativity: principles of provision

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There is a paradox in provision for the arts in education as we approach the end of the millennium. It is this: while policy-makers everywhere say how important the arts are in education, provision is decreasing almost everywhere. It is true in America and in many – though not all – European countries, including my own.

I am currently chairing an organisation called the National Advisory Committee for Creative and Cultural Education, which was set up by the Labour Government. It is a very interesting Committee. It has on it not just artists but also scientists and leading industrialists. One of its members is Lord Stone, who is the Managing Director of Marks and Spencer. When I asked him to be on this Committee, explaining that our remit is to look at the creative and cultural development of all young people, he said he would love to help, he thought this was really important. But then he surprised me by saying he doubted his suitability. He said that he had been hopeless at school and had had to leave when he was fifteen.

It is my experience, and the experience of about half the members of the Committee, that many people do not succeed in life until they have recovered from their education. This seems an appalling paradox. Another member of our Committee is Professor Sir Harry Kroto, who won the Nobel Prize for Chemistry for discovering the third form of carbon. He is a designer as well as a scientist. This is important because I wanted to show in the composition of the Committee that the education system divides processes which start to come back together again once people are released from education: the arts and science and technology, in particular. Our Committee includes theatre directors, fashion designers and people from many other walks of life.

The reason for this initiative is that education everywhere is facing entirely new challenges. What is happening now is absolutely without precedent: economically, socially, culturally and largely because of the impact of new technology. It is not just the date on the calendar that makes us think about the millennium. We are facing completely uncharted territory in the next century in terms of our social and economic systems. Everyone knows that education is the key to the future.

What is distinctive about the current situation is not the fact of change itself – things have always changed – but the pace of change. In the next thirty years, according to the United Nations, more people will be looking to gain formal qualifications through education than ever before since the beginning of civilisation. Education is now one of the world's biggest businesses in both the developed and the developing world. Everybody wants to get educated. They know that to succeed in any sense at all in the world of the 21st century, you will need qualifications.

The problem is to determine what kind of education and what kind of qualifications will suit people in this new world. Everybody knows that qualifications are the key to employment. But what we are now discovering is that qualifications are like any other currency – there is a risk of inflation, when too many qualifications chase too few commodities. Let me give you an example. About twenty years ago, one out of every twenty 18-year-olds in Britain went into higher education. Now it is one in three. So about one-third of the population will have a university degree at some point. The trouble is – what is a degree worth when we have all got one?

About ten years ago, if you had a degree – any degree – you got a job. You could have a degree in biochemistry and people would ask you to come and run their company because it was not the degree that mattered, it was the fact that you had one. I was on an appointments panel recently at the University of Warwick. Looking through the shortlist of candidates, I asked the person chairing the committee what we were looking for exactly. And the chairman said we were looking for somebody with a good Ph.D. I said 'a what?' 'A good Ph.D.', he repeated. I said, 'Do you mean as opposed to a bad Ph.D.?' These days, some universities take it for granted that candidates will have a Ph.D. In twenty years' time, maybe having a Nobel Prize will not be enough. 'OK, you have a Nobel Prize, but what else can you do?'

Another fact: about 80% of all the scientists who have ever lived are living now. There has been an exponential expansion in science and technology. I do not know the figure but I would guess the same is true of the arts – probably the majority of artists who have ever lived are living now.

This completely changes the picture in terms of what counts as originality, what counts as important, and how people see themselves. Interestingly, it is only really in the last three hundred years that being an artist has been seen as any kind of job at all. The professionalisation of art – people putting ‘artist’ on their passport – is quite a recent development. And to me it seems in some ways a curious one, that people ‘do art’ for a living. In some cultures art is just part of what goes on. But that is also one of the reasons why there are more artists living than ever before – because more people claim it as their profession. In these and other ways, the social, economic and cultural environments are changing exponentially. Everywhere we know that education is the key to the future because of these contextual changes. Everywhere, people say that the arts are vital. Yet almost everywhere the provision is actually deteriorating, in formal education. Why is this?

I think if we are to make any headway in the next century we have to understand what the problem is. It was Bill Clinton who had a sign in the oval office saying ‘It’s the economy, stupid!’ – meaning keep your eye on the ball. In all of our countries, education is growing at a huge rate and it is creating an enormous financial problem.

How do we pay for its expansion and all the other social commitments? The paradox that has been created is this. Politicians I know in Europe, America and elsewhere say publicly how important creativity is – and they are absolutely right to say it, but in many countries there is a pressure of public accountability in education which is stifling creativity in the education system. There is a pressure of managerialism, with governments looking for comparative data for evaluation – objective results. The tendency is for the assessment and accountability systems in education to emphasise areas that are inimical to creativity. That is the paradox.

Many people here are working in institutions where you are being encouraged to do more but able to do less because of the pressures of accountability. This problem stems partly from a need for cost effectiveness, and this is important. But there is also a resilient idea that education is a linear process. This has been true for a hundred years. If you want more engineers, you run more engineering courses. But we know that in the future employment will be very diverse and disparate, and that people may take on many occupations during the course of their working lives. However we do educate people, their careers will not follow a straight line. We need instead to educate them by developing all of their resources. This is why developing creativity is important – but we need to have systems in place, in our institutions, which encourage rather than discourage it.

Most of us here are concerned in one way or another with the professional training of artists. What are we training them for? If there are more artists alive now than ever before, why do we need any more? How do we persuade hard-headed politicians that social exclusion can be addressed by increasing the output of musicians by 10%? What role will these artists fulfil? We still train artists in our institutions in Europe on the basis of a 19th-century model of artistic practice. The arts are expanding rapidly outside education, but they are doing so in two quite distinct areas. These two areas have profound implications for the ways in which we train artists.

Nanotechnology is the technology of making very small things. It has come out of quantum mechanics. The unit of measurement in this science is the nanometre. While astronomers use the light year – the distance that light travels in a year – to measure distances between planets, nanotechnologists use the nanometre to measure the spaces between molecules. I asked the professor of nanotechnology at Warwick how big (or rather how small) a nanometre was, and he answered 10^{-9} . This did not help me very much. So I said – well, roughly how big is that? He thought about this for a minute, and he said ‘A nanometre is about the distance that a man’s beard grows in one second’. That is quite small.

Using nanotechnology, all the computing power that now sits on your desk will soon be reducible to the size of a thumbnail. Computers will be so small that you will wear them on your skin, and they will be powered by surface electricity.

In future, two of the most dynamic areas of research and development – information technology and biogenetic science – may converge. In the near future we may have technically assisted intelligence process implants. In these ways, the technological revolution is only just beginning.

Some of the most important areas of creativity and of intellectual property are in science, not only in the arts. In our institutions we divide arts and technology. Out in the culture they are intimately connected, and together these represent huge areas of growth.

The cultural industries are one sector but there is another equally important area: the area of community development, education and outreach. Over the past twenty years, many thousands of artists around the world have developed practices of engaging other people in the process of the arts, not on a commercial basis, but as a form of community empowerment, of personal growth and development. These are two powerful and related themes. They point to five principles we should apply in education and training.

- First, we have to develop our training programmes specifically to promote creativity. Most of our education systems – including many of our arts training courses – do not do that. I see just as much non-creative work being done on arts courses as in any other area, and a good deal of very creative work in science. We need to be clear about what creativity is and how to promote it, and to recognise that it is about styles of teaching as much as anything else.
- Second, we have to emphasise interdisciplinarity. Most of our training institutions work in bunkers. Musicians talk to musicians, dancers talk to dancers. We train them separately, but when they get out into the world they increasingly work together. Some of the most interesting work in the arts consists of interaction between disciplines. Our institutions are still based on notions of separateness rather than of community.
- Third, we have to look at ways of developing intersectoral courses. We should be connecting with community groups, cultural organisations, the business world and so on. Arts institutions can not afford to be islands, and yet many of them are.
- Fourth, our institutions must be intercultural. Culture involves interaction and growth. Institutions tend to try and stop culture so they can teach it. We have to see culture as dynamic and international. We have to educate people to understand different cultural traditions and the relationships between them.
- Finally, we have to accept that many of the people we train will not do the jobs we train them for. They will go on to do all kinds of things. There are huge opportunities for people in applying the arts in the cultural industries and in community development. Most of our models in the training sector are based on concepts of the concert platform or the Oscar ceremonies. We train people as if they were all going to be stars, when we know that only one or two of them ever will be. The result is that people go into education by default. I hear actors say that they teach when they are not working. If we are to meet this huge demand for education, if we are to meet the enormous social and cultural challenges we face, we have to recognise that we are wasting huge creative resources in the people we train because we are training them for one particular thing when they might do many.

Everybody, everywhere, talks about the need to develop human resources. This is essential, but we must begin by recognising how rich and diverse these resources are. The arts are the evidence of this richness and diversity as well as ways in which it can be developed. That is our particular responsibility, as much as – if not more than – anybody else's.