

vision

Looking at the future of learning

July-Dec 2009 FREE



Getting creative about curriculum

What is possible and what is being done in practice?

Plus an interview with Sir William Atkinson, the inspirational headteacher featured in Channel 4's 'The Unteachables'

Audio-visual technologies

What part could they play in education?

Find Your Talent

More on this programme to support creativity

Learning your way to health

How might new approaches to learning help us tackle obesity?

Learning in families

We explore the range of activities that take place and the benefits they bring

Re-engaging disengaged learners

What support is available and how might technology help?

About Futurelab

A not-for-profit organisation, Futurelab is passionate about transforming the way people learn. Tapping into the huge potential offered by digital and other technologies, we are developing innovative learning resources and practices that support new approaches to education for the 21st century. Working in partnership with industry, policy and practice, Futurelab:

- incubates new ideas, taking them from the lab to the classroom
- offers hard evidence and practical advice to support the design and use of innovative learning tools
- communicates the latest thinking and practice in educational ICT
- provides the space for experimentation and the exchange of ideas between the creative, technology and education sectors.

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This and previous editions of VISION are available to download free from the Futurelab website - www.futurelab.org.uk/vision.

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Blog

Take part in FLUX, a blog hosted by Futurelab which offers the space to debate and discuss the latest in innovation and education - flux.futurelab.org.uk.

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learning

Welcome to

vision

In his interview with VISION, the “charismatic and indefatigable” (in Ofsted’s words) headteacher from Channel 4’s ‘The Unteachables’, Sir William Atkinson, suggests that we need to “encourage creativity and risk-taking” in order to transform education. Nothing new in this, you might argue, but you might concede that it can be difficult to do in practice (something which Atkinson himself has managed). In this edition of VISION, we not only explore the case for creativity in teaching and learning but also look at the practical steps that can be taken to make it happen.



Perhaps we should start by turning to the curriculum. Currently, schools are presented with an unparalleled opportunity to be creative about what they teach, how they teach it and when and where it is taught. But many are simply not aware that they have this flexibility and so I, for one, welcome the recent media interest in the Rose Review of the primary curriculum and other high profile reviews and discussions regarding curriculum change. This edition’s article reinforces this opportunity for change and explores barriers to, as well as examples of, more innovative approaches to curriculum that exist up and down the country.

Creativity is very much at the heart of the article on Find Your Talent (FYT), the latest phase in the Government’s strategy to give all young people access to five hours of high-quality culture a week. With a variety of initiatives, ranging from bussing children from deprived areas to city centre museums to installing local artists-in-residence within schools, this programme aims to give young people the chance to try out different cultural and creative activities, with the emphasis very much on their own interests. For me, Dan Evans, dancer and FYT educator, sums up the essence of this programme perfectly: “Culture is defined by every individual, adults telling children what it is doesn’t work”.

For that matter, as we all know, telling young people that they should learn at all doesn’t work either – and looking at how we might re-engage disengaged learners is the subject of ‘Getting Engaged!’ on page 06. While there isn’t a quick fix, it is nonetheless heartening to know that there is a great deal of practical help available - not least by using technology which can support learner choice, enabling them to learn how and when they want. Which brings us back to the subject of creativity. To effectively support learning – whether with disengaged young people or learning in families, learning about health (the subjects of two more articles in this issue) or within any other context – it seems that the most important thing we need to do is be creative about the educational experiences we are offering. Francis Bacon once said that “the creative process is a cocktail of instinct, skill, culture and a highly creative feverishness”. My hope is that VISION is able to inspire you (albeit in a very small way) as you endeavour to make and shake that cocktail on a daily basis.

Stephen Breslin
Chief Executive
Futurelab

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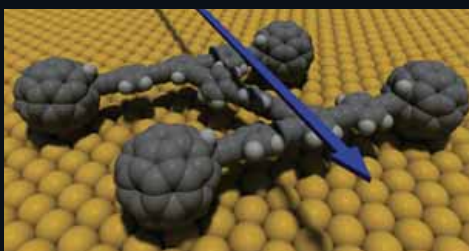


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Many schools are under the misconception that they don't have any flexibility over curriculum. We explore what is really possible and what is being done in practice.

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Creativity is central to a vibrant, innovative world in which change happens. Without it, we would not all be using the internet every day or communicating with those on the other side of the world. Here we celebrate a few of the latest creative offerings.



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Children are exposed from a young age to a range of AV technologies so, with this familiarity in mind, what part could they play in education?

Learning your way to health



Children in the UK are suffering an epidemic of obesity, and the current generation could be the first to have a shorter life expectancy than their own parents. Researchers at the Exeter University Centre of Children's Health and Exercise recently found that the number of overweight children in the UK has doubled in the last 15 years, with one in five girls overweight at the age of 11. But how might new approaches to learning about health, particularly using technology, help us to tackle this epidemic?

"We need to find new ways to engage children in exercise and healthy lifestyles," says June Sullivan, Chief Executive of the Westminster Children's Society, which runs children's centres in Central London, echoing similar calls from organisations like Play England and Learning Through Landscapes and the Government's Every Child Matters agenda and Children's Plan. She continues with a rather bleak view of the current situation: "For many children, particularly in urban areas, there is virtually nothing that encourages them to be active. There are virtually no outdoor play areas, schools no longer have playing fields, and parents are labelled as neglecting their kids if they dare to let them play outside."

Almost none of the children Sullivan sees reach the recommended minimum of two hours of exercise per week. "Lots of the children we work with live in small flats and parents send them off to their rooms where there is a PlayStation and a TV, and the children become less fit and less inclined to be active."

Research suggests that Sullivan's experience is far from unusual: according to the Youth Sport Trust, only half of all primary schools have playing fields, just 10% have a gymnasium and less than 5% employ a specialist PE teacher. In 1994, one in three primary school children took part in two hours of organised sport each week, but by 1999, this had dropped to 11%. Since then, the Government has introduced a target for primary schools to provide two hours of exercise each week, and now claims 86% of schools meet the target. However, research shows that 14% of all students – some 900,000 pupils – miss this target.

"It's easy to blame the problem on timetabling or lack of facilities, but I think

This requires the children to run, stretch and bend, and their reaction times are recorded, and given a score. "It's based on the same principle as a video game, where you are rewarded for your reaction time, but here you make big movements," explains Hodgkins.

During the development of i.play, researchers from Loughborough University tested the equipment with children to see if it encouraged them to be engaged – and active. "We took it to various schools and got the kids to play with it, and then measure their perceived exertion and enjoyment on a scale of one to ten, while we measured their heart rates," says Hodgkins. What the researchers found was that the children enjoyed playing the

drives competition for lots of children, where they will play for much longer because they're trying to beat someone's high score."

Each i.play has a GPRS-enabled internal computer that schools or local authorities can text to find out what kinds of games have been played, for how long, and with what results. Over time, the i.play team hopes this will provide insight into whether i.play encourages children to spend more time being active in the playground. "My feeling is that it will show increased levels of activity, simply because the children enjoyed playing with i.play so much," says Hodgkins. "Every child we spoke to said they'd be more likely to go to their local playground if it had this kind of system."

"It's easy to blame the problem on timetabling or lack of facilities, but there's a big issue in how to engage children with exercise and sport"

there's also a big issue in how to engage children with exercise and sport. Given the choice, lots of young children would prefer to play a video game than go to their local playground," suggests Phil Hodgkins, from the Sports Technology Research Group at Loughborough University.

This was the issue Hodgkins set out to address with i.play, a new range of playground equipment designed to bring a video-game experience to outdoor play. With i.play, children are given voice commands challenging them to hit buttons, flick switches, pull levers and twist knobs.

game and, as their enjoyment increased, their perceived level of exertion fell. "So they were exercising quite hard, but didn't necessarily notice because they were having fun," says Hodgkins.

Like a video game, i.play has different levels of play, and children are challenged more as they become proficient. This progression is one of three key aspects of engagement that the i.play team identified. "Children want to be challenged, to feel they're making progress," says Hodgkins. "They are also hugely motivated by having the feedback of a score, and of course that

Of course, for many local authorities and schools, there simply isn't a suitable outdoor space for this kind of activity. Hodgkins hopes that this will change following the publication of The Children's Plan in December 2008, which announced that all top-tier local authorities in England would receive £1m to develop free play areas for children aged 8-13, while 30 pathfinder authorities would receive an extra £1m to build new adventure play areas.

While such initiatives will help younger children to become more active, one of



the biggest challenges for any school is encouraging teenagers (particularly girls) to take part in sport. Forty per cent of girls drop out of school sport completely by the time they reach their teens, meaning they are at increased risk of osteoporosis as well as breast and ovarian cancer in later life. Girls who regularly take part in sport tend to have better self-esteem, socialise more and have lower weight and healthier immune systems – so the rewards for engaging teenage girls in sport are significant.

One interesting approach to this issue is Cyber Coach, a virtual fitness class that uses large 'dance mats' that are wirelessly connected to a projected video of a fitness instructor. Originally developed for use in health clubs and fitness centres, Cyber Coach has been an unexpected success in schools and was recently shortlisted for a BETT Award. "What we've done is develop a version of the system especially for schools, which is much more dance-based, and suitable from primary age upwards," explains Glen Jones, Managing Director of Quick Holdings, which manufactures Cyber Coach.

Cyber Coach is similar to the hugely popular Wii games console, but is designed to ensure children can't 'cheat', says Jones. "With the Wii, you can see kids make the character run just by wiggling the control a bit. With Cyber Coach you have to transfer

your body weight from one side to the other to make it register, so they have to really work quite hard."

Current Cyber Coach classes for schools include Bollywood dancing, cheerleading and seven-a-side football, all designed to fit in with the National Curriculum. "This definitely appeals to kids who don't traditionally take part, who aren't interested in team sport, or perhaps lack confidence because they're not one of the so-called 'sporty' kids," suggests Jones.

The system is also helpful for schools that may not have a specialist PE teacher, or where the PE teacher is a specialist in one area. "We've had schools where kids have learned cheerleading moves, then the kids are put into groups to make up their own moves and then perform them – that's not something you can easily do if your PE teacher is a six-foot tall rugby player," says Jones. "Even if your PE teacher knows about ballet, they won't necessarily know how to do body-popping or street dance. This is a tremendously flexible teaching system."

This kind of system has enormous potential in schools, says Ollie Bray, Deputy Head at Musselburgh Grammar School in Edinburgh. The school is currently taking part in a research project with Herriot Watt University, testing the potential of 'exergames' and dance mats in schools.

"Cyber Coach is cheaper than other dance mat systems I've looked at, and it's interesting to schools because it has a number of multi-player games that up to 32 children can play simultaneously," says Bray. "I liked that the games were fun but also tested children's memories and strategy skills. The best thing is they all required rapid movement and exercise outside the confines of traditional PE. The routines are really child-centred and motivating, and I think it's a really interesting addition to the school PE department."

The reasons behind the UK's obesity problem are complicated but research has helped to offer some insights. "We found the key underlying reasons for children being increasingly sedentary were the lack of affordable exercise options, unsafe communities, children not walking to school, and the rise in low-activity pursuits such as computer gaming and watching TV," says Hodgkins. But research at Loughborough University has shown that technology has a real role to play in reversing this epidemic. "Using technology, we can bring the gaming experience to outdoor play, but we can also encourage children to be more active while indoors," suggests Hodgkins, offering hope to the next generation regardless of whether or not they are able or inclined to take part in outdoor activities.



FREE handbook on outdoor spaces

The 'Reimagining Outdoor Learning Spaces' handbook offers guidance, support and some new and alternative ways of thinking about the approach to designing outdoor spaces, particularly in a primary setting. It aims to support those involved in the Primary Capital Programme and other related initiatives such as Building Schools for the Future.

Go to www.futurelab.org.uk/handbooks to view or download the document for FREE (hard copies are available on request while stocks last, details can be found online).

Links

- Learning Through Landscapes - www.ltl.org.uk
- Play England - www.playengland.org.uk
- Futurelab's prototype project to encourage learning about fitness - www.futurelab.org.uk/projects/fizzees
- Take learning outdoors with this free online resource - www.createascape.org.uk

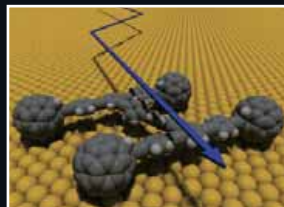
Technology update

They range from logical developments to tests of your credulity, but be assured, all the items in our technology round-up are underway and, one day, we may well be using them in one form or another...

Reinventing the wheel, nano-style

Researchers at Rice University in Texas, USA have developed the world's smallest vehicle with moving parts. By using a sophisticated fluorescence microscope, they observed the nano-sized 'cars' moving around on a glass slide at about nine nanomiles per hour, with their wheels actually turning! The wheels are spheres of carborane containing 24 atoms each, and the entire car measures just 3-4 nanometres across (a human hair, by comparison, is about 80,000 nanometres in diameter). It is hoped that this development could lead to more sophisticated molecular machines that could undertake a variety of jobs on a nano-scale.

www.owl.net.rice.edu/~slink/nanocar.htm



Rice University

Low-cost home networking

The US computer giant Marvell has launched the SheevaPlug; a tiny, low-cost piece of hardware that is designed to run network-based software services. Enclosed in a plastic case, the device also contains its own universal power supply. But the really interesting part is that its hardware design is completely 'open', being available on a website for those that want to undertake development work. The company claims that the SheevaPlug can be used to replace a PC-based home server for many applications - and it is expected to be available for as little as \$50.

www.marvell.com/products/embedded_processors/developer/kirkwood/sheevaplug.jsp



Reality check

As part of a research project on augmented reality (AR), the Georgia Institute of Technology, USA is aiming to understand how to create engaging experiences that combine the real-world and virtual environments using see-through head-worn displays. This research offers endless possibilities for gaming (for example, gamers can see computer-generated characters superimposed onto the real world around them) as well as online networking, but it could also help to transform everyday life too. Other plans include the development of tools that enable users to create AR games themselves and the evaluation of commercial-grade AR applications in realistic settings.

www.augmentedenvironments.org/lab/research



Georgia Institute of Technology

Keeping your finger on the technology pulse

Becta has launched a new web resource offering a one-stop shop of news, articles, research, views and opinions on emerging technologies for learning. Complete with an online discussion forum, the Emerging Technologies site aims to provide an environment for debate on the future of technology within education. The site also offers information on key technology trends and analysis and a variety of articles relating to the use of new technologies to support learning. And the information flow is not a 'one-way street'; visitors are encouraged to comment on content and to propose research, articles and events for inclusion.

emergingtechnologies.becta.org.uk



Digital tattoos

Ever needed to remember something and couldn't find a piece of paper? Yes, lots of us scribble reminders on our hand, but it often wears off. Or what about those of us that have tattoos, only to realise that we don't want them later on down the line? The Rensselaer Polytechnic Institute in the USA is developing hair-sized 'nanotubes' that can be implanted under the skin and can display notes and images as if they were tattooed onto your body. VISION can only imagine that, if perfected, such technology could have endless possibilities for use...

news.rpi.edu/update.do?artcenterkey=1394



Nasa - Wikimedia Commons

Preparing for the future

In this world of change, it is hard to plan effectively for the future. If you are embarking on school redesign, planning a curriculum change or just need support for any long-term decision making or strategy setting, then Vision Mapper will help. Part of the Beyond Current Horizons project, this online resource provides inspirational and practical materials to support future planning including possible future scenarios, current trends and case studies of people who have successfully embarked on long-term planning initiatives.

www.visionmapper.org.uk





Getting engaged!

A number of young people feel disconnected or alienated from learning and school, often leading to truancy, dropping out, or just plain disinterest. Schools are often overstretched and can't always meet individual students' needs. But what support is available to re-engage these young people, and how might technology help?

There are a number of organisations that work hard to re-engage young people with education, using a range of strategies and tools to raise interest, inspire and co-create learning opportunities that are more relevant to today's learners. One means of re-engaging young people with learning through the use of technology was demonstrated by Pembrokeshire College's mLearning project, which ran from 2005 until 2007 - the project was funded by the now defunct ERDF (European Regional Development Fund). The idea behind the

project was to use PDAs (Personal Digital Assistants) to help young people to engage, communicate and stay in touch with their tutors with a greater degree of flexibility.

Initially, tutors met with the individual learners once a week and got to know them and their specific needs. These sessions provided learners with help in developing key skills and preparing CVs, and assisted them in finding a job or enrolling on training courses and gaining qualifications.

Gaining trust was the key in the one-to-one tutor-learner relationship. Learners were required to complete individual learning plans and assessments and commit to the project in order to be loaned a PDA. The device provided the learner with flexible access to their tutor and online resources and could also be used for carrying out relevant learning activities such as literacy and numeracy games.

The project's target of assisting 90 people was easily met and more than

half of these successfully achieved their personal objectives.

Former mLearning tutor Lisa Smith thinks that the key to re-engaging the participants was not the obvious loan of a PDA 'carrot', but the bespoke one-to-one tutoring package the learners received. "It was handing over the control of the learning process back to them. They could choose what they wanted to do and discuss what was relevant to them. And you can achieve so much more in a short amount of time like that. I really believe that wasn't anything to do with the gadget. I think the gadget drew them in, but actually it was that one-to-one time that retained them."

Another successful initiative is Notschool.net, an international online learning community that is aimed primarily at 14-16 year-olds and offers an alternative to mainstream education for disengaged young learners. It was developed as a DCSF-supported research project in 2000, and since then 5,500 young people have

The success rate is excellent: 98% of the participants achieve point-carrying qualifications on the national framework, with about 76% per year moving on to college or college-related work such as apprenticeships and day release schemes.

"I enjoy taking part as you're not told what to do, you can do any piece of work you like and earn certificates at the end of the work you do," says 19 year-old Jamie Reid from London. "I find that, if you're not told what to do, then you end up doing that thing that people want you to do. Things are so much better that way. Notschool has educated me to the brim. I know much, much more now than I did when I was in school."

Jamie struggled with dyslexia and maths, for which he was bullied at school. He ended up avoiding school until he was referred to Notschool.net. Being part of this online community improved his spelling and maths and he became more confident. Notschool.net also helped him discover his passion for making animated movies.

Technology plays an important part in what Rathbone does to help: young people use e-learning, record sounds or make movies - all with the view that they can learn problem-solving skills, improve skills they already have, take responsibility for their own behaviour and build their self-esteem. For example, the voice-activated dictation program Dragon helped 22 year-old Anastasia Relph from Penrith to improve her writing skills. Anastasia had been told that she couldn't become a teacher because of her dyslexia, but now she is hoping to go on to study NVQ Level 3 in childcare next year and then to continue her studies at university.

Leanne Connolly is one of the young people on Rathbone's Life Skills programme. The 16 year-old was bored at school and had a bad attendance record. Her school referred her to the Glasgow centre and she is now registered with Careers Scotland where she is being helped to make informed, effective career choices and being supported to enter the world of work. Leanne is

"IF YOU'RE NOT TOLD WHAT TO DO, THEN YOU END UP DOING THAT THING THAT PEOPLE WANT YOU TO DO"

been through the system. On average the learners take part for 18 months, but some stay longer - up to three years if they join in Year 9. Most students go to college at the end of Year 11.

Participants receive a computer that they use from home. Being part of an online community means that Notschool.net learners are in touch with each other and feel less isolated. Learners are called 'researchers', choose how they want to work and follow a curriculum that they want to follow. The teachers are called 'mentors' and their job is to find out the learners' interests and build projects around them.

"We take a lot of notice of the kids and what they tell us. They take part in interviews when we recruit new staff and we really try to listen to what they say. It's their community. Teachers often say that our approach is why they came into teaching in the first place. They can focus on the learner in a far more positive way," says Jean Johnson, Chief Executive of the Inclusion Trust which runs Notschool.net.

Jamie now hopes to find work experience in an animation studio and a place on an animation course at college.

The voluntary youth sector organisation, Rathbone, provides opportunities for young people to change their life circumstances by encouraging them to re-engage with learning. This re-engagement enables them to pursue their goals and progress into further education, training and employment. It's aimed at 14-19 year-olds and each year over 14,000 young people join Rathbone's programmes - which cover areas such as 'Youth Engagement' and 'Preparation for Life and Work'. Rathbone has more than 70 Youth Engagement teams throughout the UK and its participants often live in the most deprived areas.

"We do any kind of activity that we know that the young people love to do, as long as it builds a foundation skill. So when they go into work they actually have a whole host of skills that we know the employer needs, like literacy, numeracy, communication at a higher level," says Ann McInnes, Centre Manager for Rathbone in Glasgow.



Both images: Rathbone





currently learning skills that will help her in gaining employment at the same time as searching for a job.

Rathbone is helping her to find a placement in a nursery and, since joining the scheme, her confidence has improved. "The Life Skills programme teaches me how to look after myself with cooking, money matters, interview skills, job searching, team working and communication. It is a small class and we go out on trips to see things that we would not normally go to, like museums. I like it because the tutor listens to us and we can help put the activities together."

The Glasgow centre has currently assisted 57% of the young people it has worked with into employment or further education, a rate that is indicative of centres up and down the country.

The independent education organisation Edge seeks to raise the status of practical and vocational learning. One of Edge's many projects is the Edge Learner Forum, a network of eight learner forums across England with about 200 young members, which aims to give them a voice and seeks to change education in the UK. Although it is an online community, a lot of its projects are carried out offline, with members meeting regularly around the country to debate and discuss current Edge projects and new ideas.

These projects include a documentary about the new 14-19 diploma and 'Edge Instead', an alternative version of a school inspection run by young people and designed for South Camden Community School in London.

"I see the Learner Forum as a place for change more than anything else. It's somewhere for me to learn skills and knowledge, and to educate people in power and other young people at the same time," says 22 year-old Michael Jones. Youth worker Michael, who experienced problems at school because of his dyslexia, has been a member for almost five years. He thinks it is important that people in power listen to young people and give them more options and ways to learn.

"More than anything, give them a say in what they are studying and let them direct their own courses." Michael thinks that the current system does not cater for the way young people want to learn and that there are not enough hands-on activities and real-life projects for them to get involved with. "There is too much learning from books, listening to teachers and sitting in classrooms."

Edge is hoping to grow its Learner Forum and make it more widely accessible to other parts of Britain. "We currently don't have a physical presence in Wales, Scotland or Northern Ireland, but we hope to involve more young people in our online work and research projects," says Jonathan Bramsdon, Partnership Director of Edge.

As we've seen, technology can play an important part in re-engaging young people with learning. Used responsibly as a tool in conjunction with skilled teachers, it can make a difference to a young person's life, enabling them to learn how and when they want. But what are the other factors that are important when re-engaging young people with learning? A recurring theme is the need to listen and respond more to learners, valuing and personalising their learning experience. And, as we've also seen, practical help is at hand – there is a range of organisations dedicated to doing this that can work with young people, both inside and outside the school system. But it also seems that more help is yet to come, in the form of insights into what it takes to re-engage disengaged learners. Bramsdon again: "The Edge is conducting a major piece of research at the moment to investigate the motivations that excite young people about being in school, training and education, and conversely what turns people off." Perhaps it's from the latter that we will learn most – watch this space...

Links

- Edge - www.edge.co.uk and www.edgeworkerforum.co.uk
- Free handbook on designing educational projects for ALL learners - www.futurelab.org.uk/resources/publications-reports-articles/handbooks/Handbook967
- mLearning - www.pembrokeshire.ac.uk/mllearning
- Rathbone - www.rathboneuk.org
- Notschool.net - www.inclusiontrust.org/notschool
- The Mobile Learning Institute's film series 'A 21st Century Education' - www.mobiledigitalarts.com/21stCenturyEducation.htm
- SHINE - www.shinetrust.org.uk
- Launchpad - www.learninglaunchpad.org/portfolio.php
- Publications such as the NEET Toolkit can be downloaded from the Department for Children, School and Families (DCSF) website - www.dcsf.gov.uk

FREE publication on digital inclusion

A new handbook from Futurelab offers guidance to educators on how to use digital technologies to support all learners, regardless of their learning, physical, emotional or behavioural difficulties. With detailed case studies, this publication offers insight into helpful practices employed by others as well as a list of resources to further support inclusive practice.

Go to www.futurelab.org.uk/handbooks to view or download the document for FREE (hard copies are available on request while stocks last, details can be found online).

A talented bunch

When Find Your Talent was launched last October, it met with a sceptical response from those critical of previous Government attempts to engage young people with culture. But six months down the line, there are signs that some of its ambitions are starting to bear fruit.

The town of Folkestone is currently being transformed into a haven for the visual and performing arts. Part of this revival is down to a new 'Creative Quarter' which contains a mix of arts venues, educational facilities and 'live-work' spaces rented out, on long leases and modest rents (courtesy of Roger De Haan, heir to the Saga Holidays fortune), to professional artists. The area is also home to a new £4.4m theatre and recently hosted a music festival. This regeneration plan is the brainchild of local charity the Creative Foundation, which aims to exploit the momentum generated by the long-awaited arrival of a high-speed rail link to

out different cultural and creative activities, and unlock untapped potential they may have as artists or performers.

Douglas Noble, Project Director of Shepway Find Your Talent, spells out his plans: "The first strand is regeneration of the built environment – buying old buildings and doing them up. The next is managing them and offering them up to creative activities. That leads into the third, which is the people who make that happen."

Those 'people' are, increasingly, the children and teenagers who are the focus

as it extends its tendrils beyond traditional audiences. According to recent Government surveys, five of the district's 24 electoral wards are among the worst for child poverty in England. Hardly surprising if some families see the arts as "a bit other", as Douglas puts it (echoing Culture Secretary Andy Burnham's sentiments when he contrasted the enthusiasm with which some people embrace sport with their suspicion of high culture). "I've never had someone say that to me," says Douglas, "but I believe it's true. But we don't want to judge that: we want to make a journey together."

"Even if you have a deep interest in opera or hip-hop, it's important you engage with different cultural forms"

St Pancras this December, and reclaim the town's status as a tourist destination.

All of which makes it a fitting home to one of ten 'pathfinders' for Find Your Talent – the latest phase in the Government's strategy to give all young people access to five hours of high-quality culture a week. By March 2011, £1.2m will have been invested to bring the arts to all corners of the sprawling Shepway district. It aims to give children and young people the chance to try

of FYT. Douglas enthuses: "Find Your Talent has the opportunity to build links between those spaces, those activities, and young people, and explain to them that's something they can be part of – and eventually be leaders of."

Though keen to avoid being pessimistic about the ability to engage children from poorer and ethnically diverse backgrounds, he identifies "pockets of deprivation" in parts of Shepway as an issue facing FYT,

The journey so far has involved several grassroots initiatives, beginning with a 'cultural audit' designed to find out what cultural activities youngsters were already experiencing – and where they felt the gaps lay. Some 14,000 school pupils were handed sheets of paper and stickers and asked to produce their own 'cultural profiles', pre-FYT. By Christmas 2009 there should be a website to which children can log in to update their profiles as their cultural parameters widen.



Students from Folkestone Academy - Martin Willis



Find Your Talent - Leeds



Find Your Talent - Leeds

A programme of residencies by artists – ranging from film-makers to illustrators – is planned in local schools. Dubbed Connect, it aims to produce collaborative work with pupils based around the National Curriculum. Moreover, the year FYT ends (2011) coincides with the next Folkestone Triennial and FYT's involvement, like all its other initiatives, is being steered by a project advisory group comprising of eleven 8-18 year-olds.

Helping to coordinate this group is Dan Evans, 19, a prodigious dancer who also juggles duties as a teaching assistant for children with learning difficulties at Brockhill Park Performing Arts College in Hythe with FYT dance workshops for Year 5 pupils at primary schools across Shepway. When asked for his views on what FYT might accomplish, he is keen to stress that adults can learn as much about culture from children as the reverse: "Culture is defined by every individual. Adults telling children what it is doesn't work." He continues: "I have friends who've been offered places to study contemporary dance at dance school, but only on condition that they complete foundation years in ballet. Why can't they study break-dancing?"

Shepway's approach to FYT is, by turns, similar to and different from those of other pathfinders. In Liverpool, fresh from its stint as European Capital of Culture, a scheme called Great Expectations is bussing children from more deprived areas into the city's major museums, while in Telford and Wrekin taster sessions in drama, dance and visual arts are being held for toddlers and teenage mothers. The emphasis in Leeds is on linking together numerous arts activities

already in place across the city. In other areas, cultural infrastructures need to be established for the first time.

One of these is North Somerset, where Liz Smith, Head of Learning at the National Portrait Gallery, is helping to devise ways of recruiting indigenous artists to the cause. The project compliments the NPG's own commitment to Strategic Commissioning – the umbrella term for museums' educational outreach work which last year received another £13m Whitehall boost. "The area hasn't got a cultural infrastructure like Bristol has, though Bristol is nearby. Its pathfinder has discovered there's a large community of artists living and working in the area and it wants to commission them to work with young people, to improve engagement in culture," she explains.

Ideas being floated by the North Somerset pathfinder – whose focus is 'identity' – include inviting youngsters to the NPG to participate in activities related to portraiture, and loaning high-quality prints of works in its collection for exhibitions in the district. In the long run, the Gallery hopes to contribute to the sustainability of FYT by producing teaching materials for schools.

Meanwhile, Jude Kelly, Artistic Director of the South Bank Centre, is hosting a three-day pathfinders' networking event this summer: "Since the South Bank is a wonderful complex of different art forms, small and large, national and international, we're inviting all the programmes, to get the young people to know the Centre. It should be a sort of national jigsaw puzzle that gives them a sense of what's going on around the country."

But what will happen when the pathfinders end? Will we be any nearer achieving those elusive five weekly hours of culture, and what might take its place at a national level? Joe Hallgarten, Director of Learning at Creativity, Culture and Education (CCE), the organisation steering FYT at a national level, says: "Pathfinders are there to explore what's needed to develop a national offer – that doesn't mean they'll continue or be rolled out. The important thing is we're asking young people to co-design this programme at every level. The aspiration of five hours a week remains, but the main aim is to give a broad cultural offering to every child. Even if you have a deep interest in opera or hip-hop, it's important you engage with different cultural forms."

One person already benefiting is Shepway FYT advisory group member Bradley Gonsalves, 13, a pupil at the Folkestone Academy which, buoyed by a £2m donation from De Haan, occupies a futuristic £40m building on the town's outskirts. "We were taken to Tate Modern. I'd never been to a big art gallery like that before – there's nothing like that in Folkestone," he says. "Find Your Talent is getting these big resources involved, and telling us culture is something you need to improve your life." Bradley believes Shepway deserves similar venues of its own: "A permanent place as big as this school for young people to go and be creative would be something people would see and think, 'OK, we've got that, so that means we can do this too'. It would be like a tree with branches coming out of it, and those branches would be ideas." Evidently Find Your Talent is already having an impact on some young people.

For more information about Find Your Talent, visit www.findyourtalent.org.

The facts

- Find Your Talent was announced in February 2008, alongside a further £110m investment in Creative Partnerships – the seven-year-old programme which fosters innovative long-term partnerships between schools and creative professionals.
- The £25m scheme arose out of the Children's Plan – one outcome of the Every Child Matters agenda.
- It is jointly funded by the Department for Culture, Media and Sport (DCMS), the Department for Children, Schools and Families (DCSF), the Museums, Libraries and Archives Council, and Arts Council England.
- A week-long nationwide talent festival, SHINE, was held in June 2008, and the full FYT programme began in earnest in October 2008 with the launch of ten pathfinder projects. Find Your Talent is one of a number of programmes generated by the new national organisation, Creativity, Culture and Education (CCE).
- The districts covered by the ten pathfinders are as follows: Bolton, North and South Tyneside, South Hampshire, Leeds, Leicestershire, Liverpool, North Somerset, Shepway, Telford and Wrekin, and Tower Hamlets.

Getting creative about curriculum

There is a perception that schools are saddled with a curriculum that is rigid, stultifying and monolithic. If so, how is Brindishe Community School in Lewisham giving a day a week to Philosophy Shop Director Peter Worley; his brief to develop the children's disposition for deep and prolonged thought and discussion? What is Kingsland Primary in Stoke-on-Trent doing devoting substantial time across two terms in which the whole school plans for the imminent arrival of a decommissioned aeroplane destined for use as a new outdoor classroom? And what are they thinking at the schools in the Parkside Federation in Cambridge, where, in the words of Assistant Principal Craig Morrison, "the new diploma in creative and media is offering students unparalleled levels of choice and opportunities for interdisciplinary working?"

The fact is that currently we are witnessing unparalleled transformation in education, with genuine opportunity for curriculum flexibility and creativity to make learning both relevant and engaging for today's learners. But some schools are quicker on the uptake than others. "Schools are at very different stages of exercising the freedom open to them," explains Gareth Mills, the QCA's Head of Curriculum Development and Implementation. "Currently, we have 1,000 schools in 40 separate networks across the country developing disciplined yet innovative approaches to the curriculum rooted in practice, that we are busy caching as case studies," he adds. "One example is the school that has adopted the idea of the flexible Friday, doing away with bells and inviting in a designer to work with entire year groups, challenging the children to use the day preparing a pitch in answer to a professional project specification."

Such positive perceptions of what schools can actually do is echoed by those supportive of recent curriculum





reviews such as the Cambridge Primary Review and the Rose review (in spite of the poor media coverage it has received). "Having two major enquiries looking at the curriculum provides an unprecedented opportunity to make real progress," says Futurelab's Senior Researcher Tim Rudd. "They establish central

And yet, despite Mills' reassurances and the fact that those schools managing to mix rigour with an adventurous curriculum are the most likely to emerge with glowing Ofsted reports, the enduring benchmarks of achievement (SATs at Key Stage 2 and GCSEs) mean that many schools are fearful of risk-taking. "I have anecdotal evidence,"

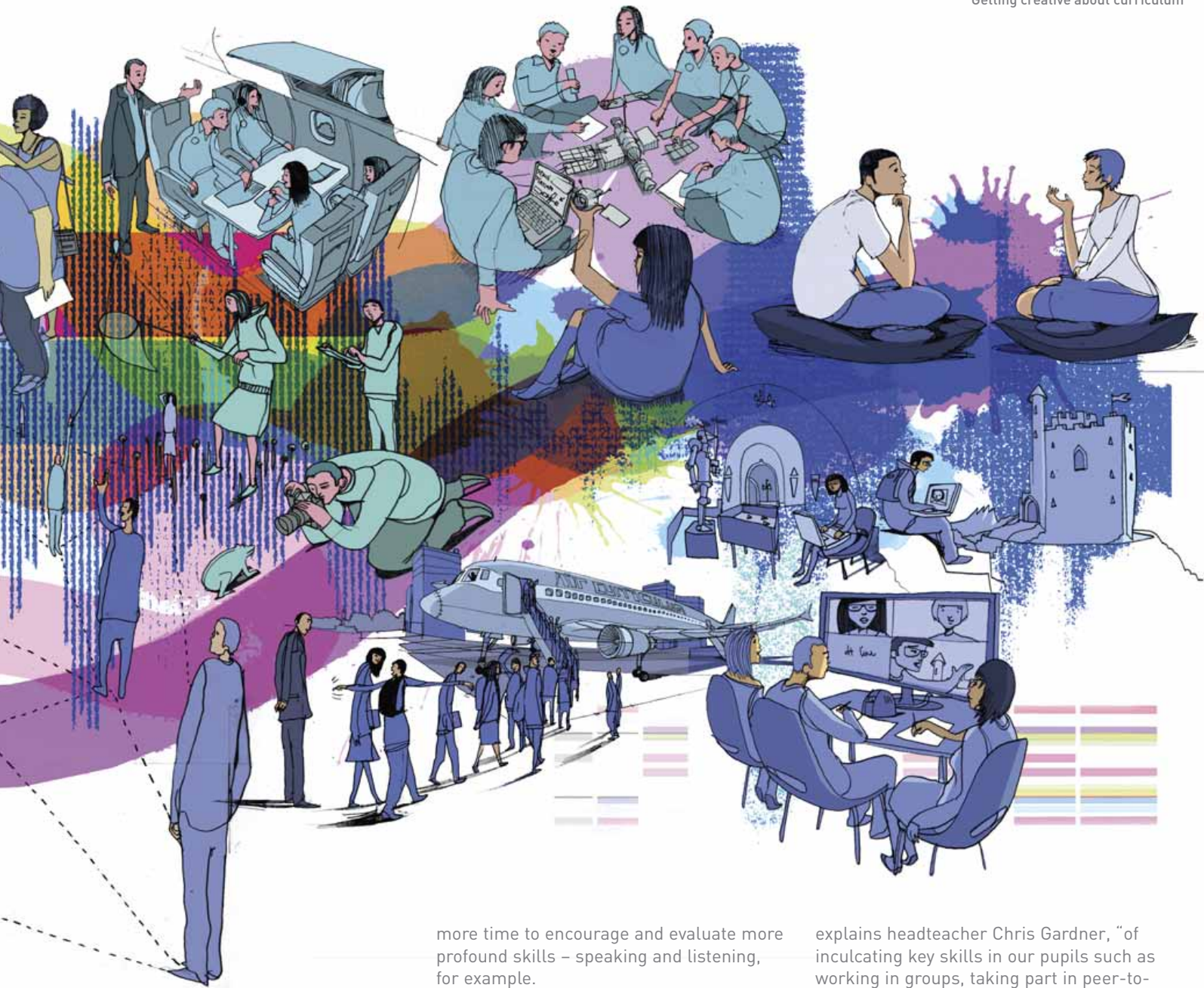
the implications of poor GCSE grades loom large. "If you create high social consequences for certain educational outcomes," argues Dylan Wiliam, Professor of Educational Assessment at the Institute of Education, "then it is almost inevitable that you will have teaching to the test."

"BEING AN EFFECTIVE TEACHER IS A CONSTANT, LIFELONG PROCESS OF CHANGE AND PROFESSIONAL DEVELOPMENT"

principles and foundations for core subjects, enabling greater cross-curricular learning. This means that, in principle, subjects can be taught more comprehensively and in more meaningful ways rather than through experiencing often isolated and unrelated silos of static content."

says Paul Collard, Chief Executive of Creativity, Culture and Education (CCE), the organisation overseeing the Creative Partnerships programme, "that some schools - far from relaxing things in Year 9 thanks to the end of Key Stage 3 SATs - are actually keeping things very tight." As for reasons why this might be,

For Paul Collard one of the biggest challenges facing any curriculum purporting to be creative is the development of a robust and yet manageable assessment regime that manages to capture that creativity. "We need far more sophisticated tools than seem currently to be available," he says. "What we need is an acceptance



that one of the reasons we employ teachers is that they should be trusted to provide insightful assessment of children in the round." A key source of such liberation for teachers, suggests Dylan Wiliam, lies in the growing sophistication of assessment software. He singles out the work at the Educational Testing Service in Princeton, New Jersey where 20 years of research is now bearing fruit in the form of automated scoring software that has moved beyond evaluation of simple tick-box answers to analysing natural language whole-sentence responses. "Though double-negatives do still seem to fox it," he remarks.

For Wiliam the great benefit of technologies such as this is their capacity for freeing practitioners from marking, giving them

more time to encourage and evaluate more profound skills – speaking and listening, for example.

But assessment isn't the only challenge to a more flexible curriculum. "It takes time for pupils to become used to being the masters of their own learning," points out Steve Moseley, a teacher at Ashton Park School in Bristol, where they have been road-testing the Enquiring Minds curriculum with Year 8 pupils. Developed by Futurelab, Enquiring Minds supports young people to base their learning around their own interests to give it relevance to their lives. "While the most able children could be relied to run with the freedom, the challenge has proved to be those children least used to taking responsibility for their own learning," he says. It is a challenge they are meeting head-on at Ashton Park by also developing their own version of the RSA's Opening Minds curriculum in Year 7, "with the aim,"

explains headteacher Chris Gardner, "of inculcating key skills in our pupils such as working in groups, taking part in peer-to-peer assessment and also acquiring the IT skills such as desk-top publishing that will stand them in good stead for the rest of their school careers and beyond."

At Robin Hood Primary in Birmingham, the same spirit of negotiation combined with embedded flexibility and the cultivation of core skills is manifest in a fascinating daily ritual. Headteacher Neil Hopkin explains: "We have a system whereby Key Stage 1 parents, teachers and children spend up to 30 minutes negotiating the content of the curriculum for each day ahead. The teachers have an opportunity to explain their priorities for each child, for example, a core skill such as paragraphing, and the discussion focuses on how this can be married with what the child might want to do."

Of course, at the heart of such flexible practice are teachers confident enough to let themselves become creative partners in learning. "It is a concern to us," suggests Rebecca Boyle, Chief Executive of Artis, an organisation dedicated to bringing professional artists into schools, "that a generation of teachers may have emerged from their training narrowed by the need to focus on the National Curriculum." However, many feel that there is nothing intrinsically wrong with the National Curriculum - it's only when it's delivered in an unimaginative way

model that's at risk of ignoring the fact that being an effective teacher is a constant, lifelong process of change and professional development." This is dependent, however, on teachers getting time out for CPD, without which, to quote Fiona Banks, Head of Learning, Globe Education at Shakespeare's Globe, "the development of more creative practice is unfeasible."

One answer to this challenge is offered by the increasing proliferation of collaborative models of creative working in which specialists come into schools, not to

terms of their own growth but also the opportunity each session affords them to conduct the kind of detailed observation of their students from the sidelines that is all too rare in the school day."

At the end of the day the success or failure, embrace or rejection of a more creative curriculum lies to a great extent with a school's senior management team. "It will take a while for teachers here to believe us when we say that we want them to be more creative and adventurous," says Sharon Nicholson, headteacher at Ray Lodge

AT THE HEART OF FLEXIBLE PRACTICE ARE TEACHERS CONFIDENT ENOUGH TO LET THEMSELVES BECOME CREATIVE PARTNERS IN LEARNING

that learners become disengaged. And, to overcome that, effective lifelong Continual Professional Development (CPD) is needed. For Pam Dawson, Primary PGCE Tutor at the University of Cambridge's Faculty of Education, it's not initial training that's the problem: "It's a time of huge creativity and excitement for many PGCE students - no, it is when they begin in their first job that the reality check can take place." Dylan Wiliam suggests that we need to be wary of focusing on initial teacher training: "It is a

release teachers for CPD time but rather to work alongside them. It is just such a model that informs Creative Partnership's projects and a large proportion of Artis' work in schools. At Brindishe Primary in Lewisham, Executive Head Vicki Paterson is adamant that the local initiative that has brought philosopher Peter Worley into the school should be an opportunity for staff development as well as curriculum creativity. "For our teachers to miss his sessions would be such a waste, both in

Primary in Redbridge - taking time out from a video-conference session with the National Space Centre in which her Year 6 pupils have been asked to develop a space station. However, with the wealth of advice increasingly on offer and ongoing training - in curriculum theory and planning as well as practice - teachers will not only get this message, but also know how to make it happen.





Links

- Enquiring Minds - an innovative approach to teaching and learning - www.enquiringminds.org.uk
- Artis - www.artiseducation.com
- The Rose review of the primary curriculum - www.dcsf.gov.uk/primarycurriculumreview
- Cambridge Primary Review - www.primaryreview.org.uk
- Cognitive Tutor Authoring Tools, timeline - ctat.pact.cs.cmu.edu/index.php?id=timeline
- Creativity, Culture and Education (CCE) - www.creativitycultureeducation.org
- KingsWings, Inspiring Creativity Through Inspiration - www.thekingswings.com
- QCA, Curriculum Innovation in Schools Report - [www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Education/Curriculum/Curriculum-Innovation-in-schools/\(language\)/eng-GB](http://www.ofsted.gov.uk/Ofsted-home/Publications-and-research/Browse-all-by/Education/Curriculum/Curriculum-Innovation-in-schools/(language)/eng-GB)
- QCA Curriculum Network, case studies - www.qca.org.uk/qca_16820.aspx
- QCA, Video Case Studies - www.qca.org.uk/qca_14001.aspx
- Media projects at Parkside Federation - www.parksidemedia.net/parkside_media
- Personal, Learning and Thinking Skills - curriculum.qca.org.uk/key-stages-3-and-4/skills/plts/index.aspx?return=key-stages-3-and-4/skills/index.aspx
- The Philosophy Shop - www.thephilosophyshop.co.uk

FREE publication on curriculum and teaching innovation

Aimed at educational leaders involved in curriculum and teaching innovation, this new handbook provides guidance for exploring the potential of personalisation to transform curriculum design and teaching practices. Drawing together key considerations from a range of initiatives across the UK, we hope this handbook can contribute to the momentum for exciting, challenging and transformational change.

Go to www.futurelab.org.uk/handbooks to view or download the document for FREE (hard copies are available on request while stocks last, details can be found online).

Phoenix from the flames



It is well known in the education world how William Atkinson took over a failing inner-city school in west London in 1995, renamed it Phoenix High School and slowly watched it rise from the ashes. Last year 77% of its pupils gained five good GCSEs, the school was judged by Ofsted to be “outstanding” and Sir William was knighted for his efforts. VISION finds out what it takes to achieve this kind of success...

Naming a school ‘Phoenix’ is a high-risk strategy: what if, with a name of such boundless optimism, it had failed to change? It is a measure of this headteacher’s passionate determination that Phoenix High School’s rise was never in doubt: “I was convinced from day one that this school could work. I knew it was going to be difficult because of the state the school was in - but I never lost faith.”

More than a decade later, he attributes Phoenix High School’s success to the calibre of its teachers, and to the partnerships the school has built with parents and the wider community. “It’s essential to link the values of school with the values of home. Young people spend 15% of their waking lives in school, and for us to do our job, that’s not enough. We have to get parents on our side, so that our 15% becomes 20 or 25%.”

Surely leadership, too, has played a part in all this? Described as “charismatic and indefatigable” by Ofsted, Atkinson was the headteacher featured in Channel 4’s documentary series ‘The Unteachables’ in 2005, and has established himself as a strong educational voice in news and current affairs programmes on television and radio. “Yes, you absolutely need a first-class leader. But the best leader in the world without a good team is nowhere.”

Leadership was the last thing the education world seemed to hold in store for Atkinson when he failed all his O-Levels except history (on coming over from Jamaica he was mistakenly placed in a remedial class and this took its toll on results). Only an inspired head of sixth form later saw his potential, when Atkinson decided that school work was his best option given his bleak employment prospects.

He chose teaching as a career, impressed by some of the young teachers around him,

and worked in tough inner-city schools in Portsmouth and London. “The young people I taught 35 to 40 years ago are no different to the young people I teach today. They need to pick up not just basic skills but higher order skills (even more the case today). They need to understand that they are part of a wider community, where people may be very different but all have the same worth and the same entitlement.”

What has changed is that today’s young people need to be “much more flexible”, he says, in terms of recognising that they will do a number of different jobs. They also need to develop as team members, more than ever before, not just as leaders but in supporting roles. “The days when people could see themselves as individuals in the workplace are long gone. We are more connected than we ever were in the past and the ‘global village’ is an absolute reality.” Schools have a vital task to “shape and develop the right attitudes”, Sir William believes. Schools should encourage creativity and risk-taking in the classroom, opportunities to lead groups and be group members, development of the kinds of research skills that will foster independent learning – all of which are possible “within the constraints of the curriculum.”

Technology has an important part to play here, he says. Teachers are beginning to understand the possibilities of ICT, but their pupils are invariably ahead of them – and schools can capitalise on this, he believes. A multimedia approach to learning – rather than the teacher standing in front of the class – allows young people to make use of the knowledge base and skills they have acquired outside school, for instance, through online social networking. “It’s about extending and validating the knowledge they have, but also finding opportunities for them to come up with creative solutions to problems which otherwise might not have emerged,”

he says. His staff are developing their use of learning platforms to interact with pupils. A new ICT building, where pupils from across the borough will study for the new diploma, combines standard classroom space with a large open-plan area “more like a workplace”, which will challenge teachers to work differently with young people. “Schools traditionally have been places where big people have knowledge which they give to little people. But this new way of working, helped by ICT, sometimes means that little people have knowledge which big people don’t have. This has potentially good consequences for pupils’ relationship with the teacher: it creates much more of a partnership and reinforces the idea that we are all learners.”

ICT, however, is only a part of the way forward for Sir William. “There is a danger of people thinking there’s magic locked up in new technology and ascribing to it too much power, to the detriment of face-to-face interaction. We don’t want 30 pupils in front of 30 screens every day, every lesson.” To inspire young people, schools need to provide “an environment that is motivating and stimulating”, with teachers to guide them and plentiful chances to interact with each other face-to-face and develop team work and interpersonal skills.

At Phoenix High School, Atkinson goes out of his way to provide a rich array of extra activities – including Latin, rowing, golf, cricket and a school farm – so that every pupil finds something they are good at and experiences success.

Balancing innovation and breadth of experience with ever higher standards is central to the headteacher’s job, in Atkinson’s view. “Innovation and standards don’t have to be in conflict. If you embrace new technology in an appropriate way and create a stimulating environment, then that can, and does, lead to higher standards.”



Keeping it in the family

Few people today would deny the importance of parents being involved in their children's education. It is now widely accepted that children whose parents are involved in their learning achieve more highly in school, and 'parental engagement' has become something of a modern educational mantra. But what does this term really mean in practice and, more importantly, how might the wide range of learning that takes place in families - including parental engagement - add value to children's learning experiences?

Parental engagement lies close to the Government's heart, not least to support its drive to push up standards and narrow the gap between children from disadvantaged backgrounds and their peers. It is one of the priorities of the Children's Plan for 2009 (announced in the progress report, 2008), which underlined ministers' commitment

to helping parents and schools work more closely together. It is central to Every Parent Matters, published in 2007 by the Department for Children, Schools and Families (DCSF), which emphasised that "parental involvement in a child's schooling between 7 and 16 is a more powerful force than family background, size of family and

level of parental education. Educational failure is increased by lack of parental interest in schooling."

But parental engagement is not just about parents getting actively involved in school life, helping out in class and on trips, joining the PTA, expressing their views

through a parents' council. It is also about what happens at home, when parents take an interest in and support their child's learning. However, it should be noted that the focus is not wholly on school - research has shown that the most impact comes from parents valuing everyday learning in the home, and thereby encouraging and motivating children to do the same.

Chris Keates, General Secretary of the NASUWT, believes more debate is needed about the meaning of parental engagement. Although the work parents do on PTAs, governing bodies and parents' councils is clearly valuable, she believes, if it is seen as the only form of parental engagement, "that is disenfranchising many parents who are intimidated by those kinds of organisations... Parents should not be made to feel guilty if they don't want to take part in those kinds of activities, and there should be more respect for parents supporting their children at home, encouraging them to play a positive part in the school day."

There is a danger that schools could treat parental engagement as something which they need and expect from parents, rather than considering parents' own needs and finding ways of working more collaboratively with them. Judith Gillespie, Development Manager of the Scottish Parent Teacher Council: "It needs to be recognised that parents are not an add-on

to the school, and the relationship between parents and schools needs to be about building a community, which everyone feels part of. Being involved will mean different things to different people."

Approached in this way, parental engagement can be considered to be a part of the much broader and potentially more enriching area of 'family learning', which can bring benefits for children, parents, schools and communities alike. Family learning is sometimes misunderstood as meaning a specific type of family programme, but Juliette Collier, Head of Family Learning at the National Campaign for Learning, defines it in its widest sense: "Families provide a rich and natural context for learning, and the values, attitudes and skills that we learn from our families can stay with us throughout our lives. Family learning is about the whole family learning together. It is a learning experience for everyone, where adults are actively involved, not simply passive observers or helpers. It's when it is a joint experience that it is really valuable to all involved."

Family learning, then, happens when parents and children find out about something together - it might be first aid, watching a football match or taking photos - and talk about it. It can happen when they visit the park together, go to a museum or an art gallery, look at a building

or go to the cinema. It happens when they sign up for a family class - in, for instance, ICT, gardening, pottery - at a school or community centre, learning and having fun together. But it also includes more informal activities such as cooking, surfing the internet and playing computer games as well as the daily activities of family life. And this learning is a two-way process - parents learn from their children as well as the other way round, for example learning to be a good parent, learning about subjects children are studying in school and learning to use computers, mobile phones and games consoles.

Schools can have a part to play in this 'family learning', supporting and inspiring parents and families to engage in a wide range of activities. Juliette Collier says: "If we are really committed to developing partnerships with parents, as opposed to just giving them information effectively, we need to move away from a 'we are the experts in teaching and learning' stance and value parents as people we can learn from and as an indispensable resource in raising children's achievement."

Schools need to adopt a whole-school approach to working with parents, welcoming them from the first as their children's 'primary educators', says Titus Alexander, author of the influential 'Family Learning: The foundation of effective



Carr Green School

education' (published by Demos, 1997). He suggests that 'class meetings', once or twice a term, are a useful way to build a relationship with parents and involve them in what their children are doing at school.

Creative projects in school, such as film-making, animation, photography, sculpture, carried out in conjunction with local artists through the Creative Partnerships programme, can inspire parents to engage in their children's learning as well as start learning new things themselves. They are also a practical way to spark better home-school communication. A report by Creative Partnerships ('Their Learning Becomes

pursue interests and develop new skills, includes a requirement for schools to make provision for family learning opportunities. Carr Green Primary School, for instance, which recently became the first school in Calderdale to receive the gold standard for its extended services, runs a flourishing family learning programme, which draws in more than half of its families every year, including those previously seen by the school as 'hard-to-reach'. Classes range from Spanish, painting and fishing, to ICT and numeracy.

"Of everything we have done at this school, family learning has had the biggest impact,"

responsible for childcare and keen to find out more about what their grandchildren are doing in school. Oldham's Family Learning Unit, for instance, now runs a 'Skills for Grandparents' course, in response to grandparents saying they wanted to learn how to send text messages and use digital cameras to help their grandchildren, as well as get up-to-date with numeracy and literacy themselves.

New technology can be a key way for schools to communicate with parents. A report in 2007 on the Engaging Parents in Raising Achievement project run by the Specialist Schools and Academies Trust

FAMILY LEARNING HAPPENS WHEN PARENTS AND CHILDREN FIND OUT ABOUT SOMETHING TOGETHER

Your Journey', 2007) found that many children were so fired up about creative projects that they talked about them at home, passing on their enthusiasm to their parents. Parents were motivated to get more involved with their children's learning, visiting places such as museums and galleries with them, or joining after-school clubs or classes.

The Extended Schools agenda, which establishes schools as places where all members of the community can come to

says Lesley Bowyer, the headteacher. "It's made parents feel more comfortable about coming into school, it's improved pupils' attainment, and it's helped parents support learning at home." It has also led to some parents developing their own skills - for instance, in computing - and going on to take formal qualifications, which can improve their employment and life prospects.

Grandparents, too, are an important part of the family learning equation, often partially

(SSAT) found that schools harnessing technology to communicate with parents showed a potential for significant improvement. But the report also warns that schools "need to be clear about what they aim to achieve as technology is not an end in itself".

The Government expects all secondary schools to be reporting online to parents by 2010 (and all primaries by 2012), giving them access 24 hours a day to information on their child's attendance



Carr Green School

Carr Green School



and performance. A parent could, for instance, log on at work, see that their child is taking a maths test and then ask them about it at the end of the day. What is crucial, according to Kirstie Andrew-Power, SSAT Head of Programmes, is that the technology enables parent and child to have that conversation. "It's the conversation that has an impact on the child's learning, not the technology," she stresses.

About one million children currently do not have internet access at home, which makes some schools wary of online reporting. But other schools are arranging computer facilities for parents in places like community centres, and the Home Access programme, led by the Government

agency Becta, is working hard to bridge the gap. In two pilot authorities, Oldham and Suffolk, the families of every child on free school meals can now apply for a grant for computer equipment and/or connectivity.

"We are finding that parents who wouldn't normally go into school are coming in because of the offer of a grant," says Nick Shacklock, Becta Home Access Programme Director. Schools need to back up the offer, he says, by providing classes to familiarise parents with the curriculum and by making good use of learning platforms to support pupils' homework.

New technology can also be a good way to attract fathers, often more reluctant to

take part in family learning activities than mothers. Tim Smith, an advanced skills teacher in Northumberland, has had great success with his 'Robot Olympics' days (loosely modelled on 'Robot Wars') which he runs for the Family Learning Service. Fathers flock to these events with their children, to spend a day building a simple robot and competing in a range of events.

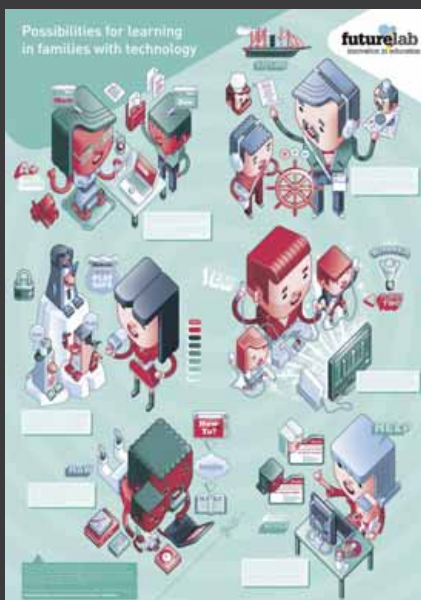
"There's always a moment in the day when the room goes quiet and parents and children are completely focused and engaged with each other," he says. "It's really lovely to be in the room when that happens."

FREE poster on family learning

A full colour poster illustrating the possibilities for learning in families with technology is now available from Futurelab. With examples ranging from visitor attractions and computer games to the use of school web portals and online 'virtual worlds', this poster supports families to overcome the challenges they face when using technology to learn together.

Go to www.futurelab.org.uk/projects/learning-in-families to request a FREE copy or to download it.

Posters on games for learning (www.futurelab.org.uk/projects/games-and-learning) and adult informal learning (www.futurelab.org.uk/projects/adult-informal-learning) are also available free of charge on request, while stocks last.



Links

- Futurelab's Learning in Families project - www.futurelab.org.uk/projects/learning-in-families
- 'Family Learning: The foundation of effective education' by Titus Alexander - www.titusalexander.com
- 'Their Learning Becomes Your Journey' - www.creative-partnerships.com
- 'Engaging Parents in Raising Achievement: Do parents know they matter?' - www.dcsf.gov.uk/research
- Home Access - www.becta.org.uk/homeaccess
- Online reporting - schools.becta.org.uk
- Campaign for Learning - www.campaignforlearning.org.uk

Getting creative

Creativity is central to a thriving, imaginative and innovative world. It is crucial to education, not just in terms of the approaches and tools used to teach, but also in the act of learning. Without it, life could stagnate and new ideas may not, in fact, be truly innovative. With that in mind, this section celebrates some exciting and truly innovative creative ideas from around the world.

Incidental

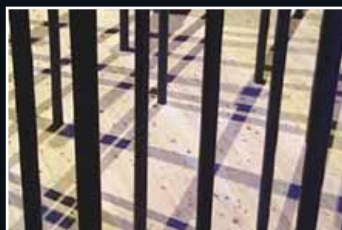


The sound of the city

Incidental has collaborated with young adults and children to create Echo Archive in order to engage people from the inner-city district of Leeds called Little London in "building a unique audio portrait" of the area. Commissioned by Opera North, it consists of an 'instrument' (which can be downloaded online free of charge) for recording audio material - such as interviews, sounds and music - to paint a picture of a district and its inhabitants. Users can also record the results of their performances as wav files and share them through a website.

www.echoarchive.com

Christian Moeller



A harmonious experience

Audio Grove is an awe-inspiring art installation by interactive artist Christian Moeller, consisting of a forest of 5.5 metre high steel posts at the Spiral Building in Tokyo. When visitors touch the posts, they emit noises which are adjusted to sound harmonious - no matter what combination of posts have been touched. Visitors' interactions also affect spotlights placed in a circle around the installation that project through the structure of steel posts onto the floor, creating a changing "carpet of light".

www.christian-moeller.com/display.php?project_id=6&play=true

Directed Play



Changeable weather

San Jose International Airport in the USA will soon be home to a new installation by artists Dan Goods, Nik Hafermaas and Aaron Koblin. E-Cloud consists of thousands of electronic square panels hanging from the ceiling which are able to adjust their opacity. The real beauty, however, is that the activity of these panels will be driven by a live feed of weather data from airports around the USA - so visitors will be presented with an 'indoor cloud', reflecting the sky where they are flying to or arriving from.

uebersee.us/projects/ecloud
www.aaronkoblin.com
directedplay.com/ecloud.html

Tim Knapen



Getting truly animated

Imagine your favourite drawing suddenly coming to life and running around on the ceiling... Graphic designer Tim Knapen has come up with a device to do just this. All users need to do is draw an imaginary creature on a sheet of paper, lay it onto the device (which is a photocopier enhanced with a camera, a projector and a PC that runs custom-made software that analyses and animates your drawing) and press 'copy'. They can then see their creature come to life, projected onto the ceiling above the device.

www.pacesetter2000.be/tk/v2/?catid=1&page=3

Yosuke Ushigome, Kunihito Nishimura, Yasuhiro Suzuki and Michitaka Hirose.



The shape of things to come

Imagine a building or sculpture that changes shape to accommodate your needs... Well, Japanese artist-engineer Yosuke Ushigome has developed

a prototype that could well lead the way to this in the future. Structured Creature is a set of sculptures that interact with their surroundings, reacting collectively by rising and collapsing as people approach them. He is now involved in the projects for full-scale interactive space.

Partly supported by: JST CREST "Technology to Create Digital Public Art" project. www.digital-public-art.org/index_en.html

www.cyber.t.u-tokyo.ac.jp/~ushi/wp/

Chico MacMurtrie



A tree-mendous idea

Growing, Raining Tree is an installation by artist Chico MacMurtrie in Cincinnati's UnMuseum, which responds to its environment. As you approach a pool which surrounds the tree, its limbs slowly come to greet you. Once they reach you, the branches pull back and begin to drip rhythmically in response to your presence. When the tree has no visitors, it takes a resting posture that many have described as "willow-like". The UnMuseum provides a view of metropolitan Cincinnati and a flood of natural light. This constantly varying light provides the Tree with the ability to change its moods with the weather, season, and time of day.

amorphicrobotworks.org/works/grt/index.htm



It's a visual thing

Audio-visual technology in education

How literate is the average 4 year-old? If your answer is “not very”, you’d be wrong, according to Mark Reid, the Head of Education at the British Film Institute (BFI). Reid argues that many 4 year-olds already have a good understanding of how stories work: “Most children have been watching film, video and television from the age of about 1½ to 2 years old. They have a sophisticated grasp of character, narrative and genre by the time they arrive at school but no-one acknowledges it; it just gets left at the school gate.”

We live in an audio-visual age. Children are exposed from a young age to a range of technologies to which previous generations had no access: television, DVDs, iPods, Nintendo Wiis, computer games, the internet, smartphones... Though it's not the case that all children are inherently at ease with technology, many adults will have had the experience of being baffled by how to operate a mobile phone, only to have a 6 year-old pick it up and have it working within seconds.

Yet schools are sometimes reticent to recognise the potential offered by the technologies that children are in contact with every day. The BFI is busy trying to convince schools that there are a range of audio-visual tools that can be used to complement books to help children to learn about narrative. Reid believes that, given the primacy of the audio-visual in everyday life, film should be an important part of the literacy curriculum: "What's really needed is a definition of literacy that incorporates speech, writing, pictures and moving

children grasp narrative: "You just see the baboon going about his daily routine and eating his breakfast and, at the end, he takes out his trumpet and he's serenading the earth; his eyes fill with tears and then it ends right there. The theme – separation anxiety – is something young kids can really identify with and, because it's not a resolved problem, they can then go on to write a sequel about how the baboon can get back to those he loves. They had real problem-solving skills there."

The BFI has found, in its work using short films in particular, that they have a big impact on children's literacy. Many teachers who have used the films have found that children who previously said very little, or had poor writing skills, demonstrate a much more sophisticated vocabulary and writing ability than they had previously shown, Reid says. He believes that because children start watching television and film very young, they have developed an ability to understand and analyse the moving

CHILDREN WHO PREVIOUSLY SAID VERY LITTLE, OR HAD POOR WRITING SKILLS, DEMONSTRATE A MUCH MORE SOPHISTICATED VOCABULARY AND WRITING ABILITY AFTER LEARNING WITH FILMS

pictures." If we can agree on a wider definition of what the literacy umbrella covers, including media and information literacies as well as those mentioned by Reid that would, he believes, "transform what teachers were enabled to do".

To this end, the BFI has been working with local authorities to provide schools with packs of seven DVDs containing 55 short films, and has trained primary and secondary teachers to think about film in terms of narrative, structure, editing and sound. They have found, he says, that film can often spark a response in children who otherwise appear uninterested in literacy.

Take one short film, 'Baboon on the Moon', which is used with small children. Shaheen Hashmat, a Research Consultant for ex-film producer and education champion Lord David Puttnam, explains how it helps

image by the time they get to school: "When it's acknowledged and built on and brought into the curriculum, it has a very positive impact. If you don't acknowledge it, it never gets built on at all." Indeed, a research report by Jackie Marsh of the University of Sheffield and Eve Bearne of the United Kingdom Literacy Association, entitled 'Moving Literacy On', says that the BFI project resulted in a measurable improvement in children's literacy to the extent of improving SAT scores in some local authorities.

But some schools are still reserved about introducing new media materials into the classroom and so could be missing out on a huge array of resources that could not only make learning more interesting but engage learners by using technologies with which they are already familiar. By way of example, the learning consultant Professor



All images: Baboon on the moon - Christopher Duriez

Stephen Heppell cites a project in which he gave 13 and 14 year-old students iPod Touches (MP3 players with screens that allow you to browse the internet) and asked them to complete certain tasks. To his surprise, he found that their search engine of choice was not Google, but YouTube, because it provided them with a clear, visual set of results rather than a series of short paragraphs.

downloading content at home and bringing it in to use in class) but also because of concerns about the content. But that attitude is beginning to change, as schools discover that, for example, YouTube has a wealth of educational content – from science experiments (there are 47,000 in all) through to PowerPoint presentations and simple demonstrations of how to play a musical instrument. And schools

some schools are beginning to understand the value of mobile phones, which these days are sophisticated mini-computers that include a camera, a video camera, the ability to record and play sound, and a GPS function. A recent Becta report by Elizabeth Hartnell-Young, 'How Mobile Phones Help Learning in Secondary Schools', showed how mobile phones could be used in a variety of imaginative ways, from taking

WHEN AUDIO-VISUAL TECHNOLOGIES ARE COMBINED WITH THE INTERNET, WE HAVE A MODEL THAT COULD TRANSFORM LEARNING

YouTube - which allows anyone to upload and share videos via the internet - and other similar sites such as TeacherTube and Teachers TV are powerful tools that are freely available to anyone and, as such, offer vast potential for the use of audio-visual materials in education. Many schools were initially cautious about these media because of the vast amount of bandwidth required to use them (some teachers and students are overcoming this problem by

can create their own content: in Castle Manor Business and Enterprise School in Haverhill, students are creating weekly videos of the school's most interesting and important events, and putting them up on YouTube for their parents to see – a kind of digital assembly.

Furthermore, most teenagers now have, at their fingertips, the ability to create moving images as well as to watch them. And

photographs of designs or experiments in Design Technology or science lessons to making a recording of the teacher reading a poem that the student could listen to later. Some primary schools have successfully used Create-A-Scape, a free learning resource from Futurelab that uses the GPS and camera functions of a handheld device such as a PDA, enabling learners to create learning journeys that are enhanced by audio-visual materials:



collections of sounds and images are triggered when the user moves into a particular geographical area.

Some might fear that an emphasis on visual and auditory technologies could displace more traditional skills of reading and writing. In reality, they give teachers a wider set of tools with which to engage learners. At Longwill School in Birmingham, deaf children have been using PlayStation Portables to keep diaries in British Sign Language. They still learn to write, but the ability to present their work in their first language has added an extra richness to it.

As an alternative to essay-writing, some learners might choose to present their work by creating a series of photographs for an animated presentation using Animoto, a free web service that enables users to create short films using photographs and music. Foreign language teachers who worry about the difficulty of getting their students to talk could try YackPack, a website that enables users to

upload and share audio messages, and can be used, for example, for practising speaking a foreign language with native speakers in their own country.

When modern audio-visual technologies are combined with the opportunity to use the internet to share and disseminate, we have a model that could transform learning. The internet doesn't just give students access to a vast range of resources far beyond the reach of the classroom. It also enables them to share the outputs of their work with others. Think of the millions of students who can watch a lecture on string theory by a Harvard physicist on YouTube; or the Essex school where the podcasts created by students now have 1,000 subscribers; or the archaeology students at Leicester University who took a tour around a Kalasha village recreated in Second Life.

What this model does is to put the choice of how to learn in the hands of the learner, by enabling them to learn in their own time,

at their own pace and in their chosen way. "Podcasts are a great example of where a fantastic resource, of an expert, such as a teacher, explaining something, can be accessed when the student needs it. It might be in revision, on a reflection of the lesson, or it might be a lesson the child hasn't physically attended but as it's been podcast they potentially have access to it," says Dan Sutch, a Senior Researcher at Futurelab.

Is the future for audio-visual technologies in education therefore a bright one? Heppell sounds a note of caution, expressing concern that a "chasm" is opening up between schools that are using audio-visual technologies successfully and those that are still waiting for a national policy to be developed. But the change will be led from the bottom up, he says: "The global curriculum will appear from teachers swapping projects with each other and picking things they want to do. You can feel that change happening now."



Using AV technology to take learning outdoors

Create-A-Scape is a FREE web resource that enables students to design and experience their own learning journeys using handheld computers. Users can create a range of experiences from tours of discovery to art installations – the only constraint is imagination! Software by HP Labs

www.createascape.org.uk

WINNER
of the 2007 New
Statesman New
Media Award
for Education

Links

- BFI DVD packs - www.bfi.org.uk/education/teaching/primary.html and www.bfi.org.uk/education/teaching/secondary.html
- YouTube - www.youtube.com
- TeacherTube - www.teachertube.com
- Teachers TV - www.teachers.tv
- Create-A-Scape – a free resource that supports the use of PDAs – www.createascape.org.uk
- YackPack - www.yackpack.com
- 'How Mobile Phones Help Learning in Secondary Schools' - emergingtechnologies.becta.org.uk/upload-dir/downloads/page_documents/research/lisri_report.pdf
- Second Life - secondlife.com

Events

ITTE 2009

7-9 July 2009

Exeter, UK

The Association for Information Technology in Teacher Education aims to promote the education and professional development of teachers in order to improve the quality of teaching and learning with ICT in all phases of education. As such, its annual conference offers an opportunity for the education community to network and remain up-to-date regarding the use of ICT in the classroom.

www.itte.org.uk/index.php?id=82

BridgED: Making Connections Between Industry and Practice

9 July 2009

London, UK

This 'facilitated networking' event from Futurelab supports managed introductions and conversations between educators and their peers from industry, and provides an opportunity to hear from inspirational speakers from both sides.

www.futurelab.org.uk/events

EISTA 2008

10-13 July 2009

Florida, USA

Relationships between education and ICT are increasingly accelerating, sometimes in unexpected ways, with original ideas and innovative tools, methodologies and synergies. Accordingly the main purpose of EISTA 2009 is to bring together researchers and practitioners from both the education and ICT communities to share ideas, research results and innovative services and products in a multi-disciplinary and multi-sector forum.

www.iis2009.org/imsci/website

Building Learning Communities (BLC) 2009

29-31 July 2009

Boston, USA

The 2009 BLC conference is designed to have an immediate and long-range impact on improving teaching and learning. With representatives from around the world along with some of the most prestigious leaders in the field of education technology, the programme features hands-on pre-conference workshops, keynotes and over 90 workshops.

novemberlearning.com/blc

SIGGRAPH

3-7 August 2009

New Orleans, USA

SIGGRAPH 2009 will bring an anticipated 20,000 computer graphics and interactive technology professionals from six continents to New Orleans for the industry's most respected technical and creative programs focusing on research, science, art, animation, music, gaming, interactivity, education, and the web. SIGGRAPH 2009 includes a three-day exhibition of products and services as well as the Computer Animation Festival. More details are available at:

www.siggraph.org/s2009

ALT-C 2009

8-10 September 2009

Manchester, UK

Learning technologies and learning technologists are now at the heart of modern learning. However, the education community still faces many challenges including that of understanding how to learn effectively from the past. Accordingly, in order to rise to these challenges, ALT-C 2009 "in dreams begins responsibility", will provide a broad forum for practitioners, researchers and policymakers to explore, reflect and learn.

www.alt.ac.uk/altc2009

IAEA 2009

13-18 September 2009

Brisbane, Australia

The theme of the 2009 International Association for Educational Assessment's annual conference is 'Assessment for a Creative World', and it aims to consider how assessment can facilitate, monitor and report student development of creative thinking and skills, across the curriculum, along with other aspects of learning.

www.iaea2009.com

Mobile HCI 09

15-18 September 2009

Bonn, Germany

With an opening keynote session by Sony's Jun Rekimoto on the integration of real and virtual environments, the Human-Computer Interaction with Mobile Devices and Services conference offers workshops, tutorials and presentations on a range of subjects covering the design, evaluation and application of techniques and approaches for mobile and wearable computing devices and services.

www.mobilehci09.org

The Scottish Learning Festival

23-24 September 2009

Glasgow, UK

This year's event promises a conference programme that consists of inspirational keynote addresses, expert-led spotlight sessions and a broad range of seminars presented by key national figures and practitioners. It has a range of activities including an exhibition, an Education Showcase and a Discussion Zone which provides delegates with the opportunity to engage in informal discussions with presenters. There is also a Learning in Practice area that has been designed to complement the conference programme and exhibition, bringing together the local, national, international and cultural dimensions of the SLF.

www.scottishlearningfestival.org.uk

Handheld Learning Conference

5-7 October 2009

London, UK

This year's theme is "Creativity, Innovation, Inclusion & Transformation" recognising that 2009 is the European year of creativity and innovation, and the value these elements have to learning, whilst identifying that real transformation will only occur following universal inclusion. Over 3 stimulating days the event will demonstrate, debate and explore how mobile technologies such as phones, entertainment devices, and netbooks can be deployed to enable transformational improvements in learning across schools, home, further education, training and business. 1,500 international delegates are expected.

www.handheldlearning2009.com/handheld-learning-conference-and-exhibition/registration

Seen and Heard: Young people creating digital media

8 October 2009

Bristol, UK

Young people are more 'digitally active' now than ever before, producing as well as consuming new media - and this brings with it new and exciting opportunities for both educational and social change, as well as significant challenges for educators and providers of young people's services. With keynote presentations from Channel 4 and innovative theatre company Limiting The Dog, as well as discussions led by young people themselves, this year's Futurelab conference offers delegates insight and guidance into working with learners as participants and producers in new media culture.

www.futurelab.org.uk/events

Education and Educational Technology (EDU '09)

17-19 October 2009

Genova, Italy

The conference on Education and Educational Technology (EDU '09) is organised by the World Scientific and Engineering Academy and Society (WSEAS). While its main focus is educational technologies, it also covers engineering technology.

www.wseas.us/conferences/2009/genova/edu

mLearn 2009

26-30 October 2009

Florida, USA

This conference is designed to bring together the world's leading mobile learning researchers, developers and activists in an environment that will stimulate dramatically increased deployment of mobile learning and accelerate dramatically enhanced innovation.

www.mlearn2009.org

Online Educa Berlin

2-4 December 2009

Berlin, Germany

'Innovate, Share, Succeed' is the theme of OEB09, and this year's agenda promises to be about the community's own learning innovations, its expertise and the great ideas that will lead its organisations and schools to success. By taking part, you will get to meet over 2,200 colleagues and like-minded people from more than 90 countries.

www.online-educa.com

BETT

13-16 January 2010

London, UK

It's the world's biggest educational technology show and attracts over 30,000 visitors every year - all the key UK ICT organisations, agencies and companies are there. This year the organisers are continuing with their successful blog to enable you to keep up to date with the latest developments around BETT, and you can also follow their show updates on Twitter. To get the most out of BETT, you need to pre-register and pre-plan to make the most of this bustling event.

www.bettshow.com

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