

After five, your brain is cooked

Current research on the brain shows that early neuron synapse connections are established at a phenomenal rate during the first three years or so. They begin to tail off by about five years and are virtually complete by about age ten. "So what?" you might ask. My reply is what the late Ed Boyer is reputed to have said a couple of years ago, when reviewing such work in USA, "Why does the bulk of the money kick in after it's no more use?" Well, why does it? Why do we invest so heavily in children post-five years, yet apply such relatively small amounts to the under-fives? Why do we persist in models of care which are haphazard, expensive and often inefficient? But here we are patting ourselves on our political backs because we are being slowly dragged into the provision of nursery education for all our three-year-olds. (Never mind the fact that France has had it free for 120 years or that most of Scandinavia provides it (means-tested) from birth!)

Why do we still pretend that most young children have a mother at home, when we KNOW the divorce statistics, when we KNOW that women are now accessing the work force faster than men in some areas? In some Canadian and Australian studies women are noted as returning to the work force on average some thirteen months after the birth of their child. Why do we persist in seeing short-term cognitive gains as more important than long-term social consequences at all levels of our education system? Why do we see care and education as separate entities when several other countries (like Sweden) see them already as 'educare'? If we are interested in cognitive gain, then why do we teach foreign languages at precisely the WRONG developmental time? Most people from bi-lingual or multi-lingual families know that their children are not held up by coping with two or more languages during the first ten years or so, that they then speak them fluently with proper 'native' accents.

There is much more to brain development than language acquisition however, and most of it seems to confirm what most early years carers and teachers have assumed or observed all their professional lives; though here neuro-science provides the hard, 'sexy' evidence. The progress in PET/CAT scans has given us information on brain activity undreamed of in former decades. For instance, we can actually see how stress affects a young child's brain; we can monitor the changes that occur in serotonin levels. We can note that early, frequent and intense stress in childhood tunes the brain to set stress regulation mechanisms at a high level. This can sometimes result in a child learning and operating in a state of persistent fear; and this eventually seems to cause changes to the overall structure of the brain which are almost irremediable.

At birth a child's brain contains something approximating to 100 billion neurons; and most of these are 'waiting' for the patterns of wiring to be set up and stabilise. This firming and stabilising is built on the repeated results of experience. Parents and caretakers' attentions are vital in the ways they help the meaning and context which is then regularly 'applied' to the individual's circuitry, since, in a very real sense, ALL learning is social. There is no concept without a context. Consistency also appears to be a vital ingredient; attachment likewise vital; and many neuroscientists think there are key critical periods for this early learning, almost as if there are windows of opportunity which, if not capitalised upon at the right time, can be largely lost or closed later.

At birth there are far more potential connections than the child can use; and, **by the age of three or so pruning has already started and systems of connection that are seldom or never used are being slowly eliminated.** We are born, for instance, capable of learning phonemic combinations not common in our native language, but will lose that capability relatively soon. There are complex relationships between the brain's plasticity and the availability of the repeated sound or experience available. By about five (or earlier) many predictive and causal social, as well as physical/locational attributions have become quite settled. In a real way, **the brain is then almost 'cooked'.**

Long-term persistent delinquency can often, by five, be reliably forecast as in the New Zealand, Dunedin longitudinal cohort study. Patterns of persistence, of self-reliance and of motivation become clearer. (Those attitudes so vital to the way we tackle life are sometimes called 'dispositions' by some early childhood writers such as Lilian Katz.) Vital windows in the brain, responsive to the acquisition of syntax and morphology begin to close.

All this is no more than to scratch the surface. What of the questions I started with? Well, it is becoming abundantly clear that how we socialise and love our children is changing throughout the modern world. Children may be as much socialised by the media as by the parent, as much by institution like crèche, or by paid carer, as by home. And we have to get it right. In all this we know that patterns of marriage, parenting, divorce and family life are changing very fast. We cannot afford to misconstrue what is happening to our children, but nor can we misjudge the social nature of learning and think that holding pencils at two, or insisting on inordinately early reading schemes would be a good thing. **The formal curriculum from birth to five is not the answer.**

Early learning does not imply presenting a watered down version of secondary schooling (often so boring that I sometimes think it a good thing that most of the brain's connections ARE already formed!). Nor does it imply what some Americans have called '*lapware*', that is, the use of computer software which the parent operates on his/her lap for the stimulation of the very young child. **We know that the brain is plastic, responds above all to social stimulation, to laughter and to play. We must not allow politicians to misinterpret the importance of the early brain research,** which leads to the following conclusions: (*cont'd over*)

- learning happens holistically
- it is difficult to segregate learning domains

- learning originates in relationships
- the child's interest is the key.

We must not forget the changing patterns of what Anthony Giddens called 'coupledom' in our societies (BBC Reith Lectures, 1999), nor the fact that siblings and the availability of maiden aunts have diminished. The modern child has a different context in which to learn, but everything points to the vitality and crucial nature of those first five years. Money needs to be transferred from other institutions and from other levels. **We are**, as Penelope Leach says, "**all children first**". So, far better to ensure attachment, stimulation, fun and a REAL childhood, than pay twenty times the cost later on in the prison or the mental home.

Perhaps too, we should take account of Bruce Perry's comments:

"if you look at teachers or social workers or case workers...the frontline staff are 85% females working with children...seeing their lives...but in the organisations that design and control public education, mental health service or child protective services, 90% of the administration (policy and practice makers) are males...who spend almost no time with children."

And, after five, your brain is cooked!

Philip Gammage

de Lissa Chair of Early Childhood, South Australia

Henry Morris: Village Colleges, Community

Education and the Ideal Order, by Tony Jeffs, Educational Heretics Press. ISBN 1-900219-06-9 price £9-95

There is a need to identify again and again the continuing vicious cycle in education systems. As Morris himself wrote in 1946, "*victory is never won once and for all, freedom has to be won daily*". In his short and pithy review of the life, works and legacy of Henry Morris, Tony Jeffs asserts that Henry Morris faced down the landowner and the parson who were seeking to keep people in their places by denying them a half-decent education. He sees the new oppressors as central government taking away power from the locally elected officials and educationalists, and delivering up the birthright to business organisations, tycoons and their nominees. Morris fought against this in his time. We learn how generation after generation seeks to impose on succeeding generations the errors and half truths which underpin the maintenance of the existing social and economic situation through perpetuating what Henry Morris called "*the insulated school*".

The "*insulated school*" in which the "*idiot teacher*" held sway in the general context of "*the dismal dispute between vocational and non-vocational education*" was, for Henry Morris, the villain of the piece. He believed that education of the whole person was possible, that it could be achieved in a radically different sort of educational institution called a Village College, that these could be set up by legislation and administered by the local administrators of education, and that this could be done not only in the countryside but also in urban environments. Further than this, he produced a blueprint for the "*community university*" version of Further Education, for the outskirts of Cambridge City, which might have set us on a quite different path of Further and Higher Education development.

What Tony Jeffs adds is his analysis of the roots which influenced Henry and which Henry himself was often loath to acknowledge because of his need, as he saw it, to court the favour of those in power. To have associated himself too closely with the Danish Folk High School and the residential Settlements movement of the Idealists in this country and in the USA, might have reduced his credibility as a pioneering innovator and increased the problems that he faced of rejection by the establishment.

(Danish Folk High Schools) and the Settlements, ideas which could once again empower people to participate democratically in their own education as a process of self-realisation and social creativity which the present regressive policies are explicitly denying.

Grundtvig, in mid-19th century Denmark, deliberately avoided trying to incorporate the schools for children into his Folk High Schools. His short-course, residential Folk High Schools were, in Tony Jeffs words, "*quarantined from these schools of death*" (Grundtvig). Nevertheless, the effect of concentrating on adult education was to be seen in the development of Danish rural society in the 19th century, and in particular, also during the Second World War in the resolute style of Danish Resistance to Nazi occupation. It is now apparent also in their more enlightened State School system, and in their innovatory and varied Efterscholen (one year boarding schools for students of 15 years or more) quite apart from their positive encouragement to parents to set up their own schools with 85% state funding and low interest loans for buildings.

The Village College had far-reaching intentions to transform the attitudes and experience of adults towards education in its broadest sense. The Burston School strike from 1914 to 1939, was during the period of the gestation of Henry Morris's ideas and the inscription engraved on a stone above the Burston School entrance read: "*to provide a Free School to be a centre of rural democracy*"! In 1939 the 'flagship' village college, Impington, was opened, designed by Gropius and Fry of Bauhaus fame.

The residential Settlements movement in the first part of the 20th century, Tony Jeffs points out, were also part of the roots of Henry Morris's thinking. Henry became known as the architect of 'Community Education' but it may well be that this has obscured the contributions of others. For example, the work of T.E. Davies who told me about his '90s, in the Welsh educational settlements built by the miners in the '30s, demonstrates how a less centralist approach than Henry Morris's can achieve remarkable results.

I was privileged to be a Village College Warden at Swavesey in Cambridgeshire between 1970 and 1977, during which time we underwent rounding out of County boundaries, raising of the school leaving age, advent of comprehensive status for our school and the amalgamation of Youth and Adult services into a generic community education division. I know personally of the strong reality of the community participation in their local village college. It was intense, widespread and contributed to the social existence within the constituent villages of our catchment area as well as to the enjoyment of our central campus with all that was offered there. However, I too have revisited Village Colleges and have witnessed how national policy towards schools and the centralisation of control over curriculum has contributed to a diminution of the essential original purpose for which the Village Colleges were founded. Tony Jeffs speaks of his "*sense of profound disappointment because they are so like other schools*". He says they are "*Better schools than average in most respects but schools nevertheless no longer Countryman's Colleges. Sadly you sense Morris would now judge his Village Colleges, despite his tireless efforts, to have degenerated to 'bloody schools'*".

My own conclusion, as one whose blood, sweat and sometimes tears are in the soil both at Swavesey Village College and later in the new Town of Telford, where for a further 7 years we strove to implement the ideas of Henry Morris in an urban setting, is that it is time to try again. This time, however, we should try the Settlement solution. It is the school which is out of date. Instead of trying to embed them within Centres, where in the end their needs dominate, the time may have come for multi-agency Learning Centres for all ages.

Philip Toogood

We are currently at the crossroads in community education, and the way to revise the practice may well be by taking from Grundtvig

In conversation with David Gribble

David Gribble began teaching at Repton School in the 1950s. He quickly realised that the English public school tradition did not have much room for his philosophy of education - based on respect for the capacity of young people to think for themselves and solve their own problems when given the freedom to do so. Ex-pupils from this era still remember him as a liberating influence in their otherwise oppressed lives. After years at Dartington Hall School he had to endure the closure of a school, in which he believed, at the hands of adults with power but no such belief. As a result he put his energies into the creation of Sands School where ownership is vested in the students. Fortunately for the rest of us, he eloquently preaches what he has practised in beautifully readable books such as *Considering Children* and most recently *Real Education*, which is based on a world tour of democratic schools.

Derry: David I have enjoyed all your books about 'progressive' schools immensely. They have a gentle but ruthless clarity and logic which make me wonder how I could have spent so many years telling young people what to do in state schools. Two boundaries interest me very much - that between home education and progressive schools, and that between progressive schools and other schools, state or private. Given the growing research evidence for the success of home education do you think there is any good reason for having schools at all any more?

David: Yes, I do think young people need schools. They may not need them as places to study, because it is often easier to study at home than at school, but they need somewhere where they can be with people of their own age who share their interests, and they need to learn to manage life without their parents to guide them.

I was being deliberately provocative when I said that schools might not be necessary as places of study, but I know many children come to school mainly to socialise. On the other hand, schools can offer such interesting and varied opportunities that their students come specifically to learn as well as to meet their friends.

I don't want to qualify my other two comments, though. Children do need to spend time with people around their own age, and they do need to practise being independent. Of course, these are things that are discouraged in conventional schools, where conversation is limited to break times and independence is frowned on, but good schools give children the opportunity to talk and to be themselves.

Derry: The model of school as a place for conversation between young people themselves, and with adults other than parents when they seek it, may be the key difference

between progressive and other schools then? Certainly the current highly prescriptive curriculum 'delivered' to large classes together with shorter lunch-hours to reduce 'control problems' are minimising opportunities for conversation in state schools.

David: I think the removal of opportunity for conversation is just one aspect of lack of respect for children. It is respect for children that I think is the essential hallmark of progressive education. If you think children can do nothing sensible without adult guidance then naturally you try to make sure they don't do anything without adult guidance, and you patrol every corner of the play-ground and silence as much conversation as possible. If, on the other hand, you treat children with ordinary courtesy, listen to what they tell you and respond as a friend rather than as an authority-figure, you are, by my definition, a progressive teacher.

(The word 'progressive' is of course an awkward one, because of the different meaning attached to it in the late sixties, when it referred to teaching practices rather than to relationships, but it is probably the most convenient word to use as long as we don't get confused.)

I have just read an interview with an Austrian boy who moved from a progressive school to a conventional one at the age of sixteen. He says that if he had a job in which he was treated in the way he is treated at school, he would leave at once. Anyone who treats not only sixteen-year-olds, but also ten-year-olds and five-year-olds and three-year-olds, with the respect that ordinary employers treat their workers, will at least have made a start.

Derry Hannam

"Conventional school organisation seems destined to produce superficially competent people who, underneath are evasive, self-interested, ruthless, frustrated, cautious, obedient, timid conformists; they will be complacent about approved achievements and easily humiliated by public failure; they will have spent so much time at school struggling to acquire knowledge that does not interest them and skills that are irrelevant to them that they will probably have lost all confidence in the value of their own true interests and talents."

David Gribble in *Real Education: Varieties of Freedom*, p.2.
published by Libertarian Education, 1998,
(ISBN 0-9513997-5-6) £8-95

Peace, dignity and solidarity: forgotten continents of education

(Paper presented at the International Seminar, *To Integrate and Educate for Peace and Solidarity*, 12th September 1998 in Lisbon, Portugal.)

While reading publications on European education one can feel that modern information and communication technologies constitute both a key problem and the source of great expectations. But these technologies are merely tools, whereas the quality of education is mainly determined by its content and the extent to which that content evokes the creativity hidden in every human being, and reveals to him the world of values.

Our world is, first of all, the world of human values where such things as dignity and solidarity come first and where peace helps to develop other values.

Peace can never be overvalued. The chaos created by wars gives expression to the worst human instincts and shows to what extent people can deny their humanity.

There are also small hidden wars that take place within families, local communities, schools and other institutions. These small wars can sometimes accumulate and lead to the great wars.

Fear is very often a crucial factor responsible for both kinds of wars.

Fear and the sense of threat and uncertainty often divide and antagonise people. All the world's regimes were built on fear and terror. People affected by fear remain strangers, and look at each other as potential enemies.

Fear and uncertainty often accompany children at school, as well as their parents and teachers. The main sources of school fears are authoritarianism, a sense of helplessness and not being told the whole truth (disinformation), and a system of assessment which destroys spontaneity and enthusiasm.

Whenever competition is merciless, egoism takes over and the creative potential of individuals simply gets frozen, affecting work both in and out of school.

Schools - arenas of Sisyphean labour

Many schools in Poland, Europe and in the world make efforts to prepare students for life and provide them with necessary knowledge. But the schools often forget that life itself is a lifelong learning process and the knowledge of today can be completely insufficient tomorrow.

By offering ready-made curricula the schools leave no space to their students to influence their own learning; students ask no questions, but simply receive and absorb what the teachers - who 'know better' - tell them.

Schools are stiff, rigid institutions where each place in the hierarchy has been allotted to somebody, once and for all. Assessment tests and systems are wrong because they lead to frustration, a decrease in self-esteem, a sense of inferiority and inadequacy, and consequently to fear. The effectiveness of schools is low but the psychological price is very high; the number of youngsters excluded from the education system is getting larger and larger.

The true mission of education

We can learn a lot from industrialists and businessmen. Those taking part in the *Round Table* talks say in their report that:

"The essential mission of education is to help everyone to develop their own potential and become a complete human being, as opposed to a tool at the service of the economy; the acquisition of knowledge and skills should go hand in hand with building up character, broadening outlook and accepting one's responsibility in Society."

The importance of a broad knowledge base - not only technological but also literary and philosophical - has been stressed. The White Paper on education and training (Luxembourg 1996) says:

"Literature and philosophy fulfil the same function in respect of the indiscriminate bombardment of information from the mass media and, in the near future, from the large information networks. They arm the individual with powers of discernment and a critical sense. This can enable people to interpret and understand the information they receive."

Such statements take us directly to the world of human values. Thus we can say education is something more than training. Education means developing the basis of human responsibility, critical thinking, intellectual, spiritual and cultural potential etc. as well as knowledge and skills acquisition.

In its crucial aspects education cannot be measured. Thus all excessive codification and setting of standards subjected to meticulous measurement is nothing more than a contemporary form of barbarism, as one can never measure what is in itself unmeasurable.

And education - dominated by standardised tests, and talking constantly about quality which, in fact, has never been clearly defined - is the opposite of true education.

Fruitful and effective education grows on the soil of the constant realisation and fulfilment of human hopes.

Fear can be conquered by hope which ripens simultaneously in the hearts and minds of pupils, parents and teachers. Hope blossoms on the soil of trust and generosity, and thrives in the common sphere of people's desire to take their education in their own hands, to expand the area of their own freedom and dignity, and to begin building their own sense of value and faith in their own strengths.

Schools' targets should be formed together and worked on together. But individual pupils' areas of freedom should always

be respected - in the form of Personal Development Projects (PDPs).

Pupils' and parents' co-partnership in decision-making is embodied in students' self-governing bodies, Parents' Councils and school boards.

Education ripening in such climates stimulates, especially in teachers constant personal self-development.

Conclusions

1. Peace, dignity and solidarity form the three-dimensional shape of education.
2. Peace is the priceless value enabling other values to flourish.
3. Dignity and hopes born from it, motivate people to search in common for new solutions and ideas.
4. That's how solidarity - the most vital source of education and self-education - is born.
5. A sense of community and solidarity expels formality and authoritarianism. The school institution becomes transparent and open to pupils' needs, expectations and dreams.
6. True democracy begins by involving pupils in decision-making at school.
7. Humanity, thirst for knowledge, self-criticism, courage in thinking are unmeasurable. The most beautiful fruits of education will never be measured. Those who do not see this simple truth are the barbarians of our times.
8. They use tests to quantify education, and while authoritatively assessing and judging, they ruin pupils' careers, psyches and sometimes lives.
9. Nobody knows for sure what will happen to our schools in the forthcoming century, but the fate of schools will be determined by what schools are doing to our children now."

Michael Jozef Kawecki, Szczecin, Poland

A nationwide study of home education: early indications and wider implications

This three year study of home education involves 1,000 families, with a particular focus on the under 11s. It will be published in full early in the year 2000. Several hundred children participated in this first national assessment programme of children educated, electively, outside the school system. These assessments measured psychological stability, academic attainment and social skills. One main area of the research, however, consisted of 135 interviews conducted with home educating families, in their own homes. Here are some of the results of the study to date.

Parental background

Home education is often associated with 'middle class professionals'. This study, however, found quite the reverse to be the case. Based upon an initial analysis, it was found that more parents were involved in manual and semi-skilled occupations than professional. More extraordinary, was the finding that the children whose parents have been classified as from the lower end of the social scale fared substantially better. Previous research supports the idea that parental social class does effect educational outcomes, but the suggestion that children from lower social classes can outperform their higher social class peers is quite possibly, unique. Perhaps the professional parents are more secure with their child's development and, therefore, may take a more relaxed view of their child's abilities at this early age. Conversely, parents of the lower end of the social scale may be more conscious of the decision to home educate, thus placing more emphasis on their child's early abilities. Further analysis will show whether this effect applies to the older children also.

Trained school teachers made up almost 1/4 of the parents. It was mostly the mother who was trained to teach and many had, if they had taught at all, done so for a short time. Despite the abundance of teacher parents it was notable that two out of three parents had received no teacher training. In many cases, teacher-parents said that teacher training made them realise that parents could teach. While some teacher-parents found their teaching experience a hindrance, other found it an asset. The consensus was that teacher training equipped parents to better communicate with their local education authority. Interestingly, two-thirds of the parents questioned found their own schooling to have been 'good' or 'average'. Despite this, almost half had left school at 16.

Motivation to home educate

Over half of the reasons given for home educating related to school, such as, 'unhappy with current school education', 'class sizes too large' and 'bullying'. Almost one-third of motivations listed were child-centred; 'we wanted to stimulate our child's learning', 'it is the child's choice' and 'meets out child's needs', and one in five parents describe their motivation in terms of their philosophy, referring to their 'ideology', 'lifestyle', their 'faith' and the 'lack of morality in society'. When families become acquainted with other home educators, as well as related literature, they adopted a more philosophical approach to education generally, often believing that the present education system needed reform.

When children under 11 years of age decided to go, or to return to school, it was often based on a desire to have more friends. Some parents simply felt that they had reached a stage where they needed more support. Amongst those children in the study who entered school, neither the parents nor children related their decision to the quality of education in school. Compromise was often a factor in such decisions where home was no longer able, for whatever reason, to cater for the child's needs.

Reading

Preliminary analysis of the literacy assessments conducted with sixty 6, 8 and 10 year-olds indicated that the home educated children demonstrated a high standard of literacy when contrasted with national attainment levels. Even where children were described by their parents or by themselves as 'poor' readers, they were often, nevertheless, meeting or out-performing, national targets. Age-norm related reading skills were not necessarily a priority for home educators. Some children read exceptionally early, others were described by their families as 'late readers'.

All the children whose families were approached, following their child's random selection for literacy assessment, agreed to participate. Some parents did, however, comment that their children would be unable to complete the test, even though they were willing to attempt it. It was interesting, then, to observe that the children, nevertheless, performed well. Conversely, some of the children parents saw as high fliers, performed rather less well.

Throughout the research it was observed that parents were often unable to predict their child's abilities. One possible cause of

parent's unawareness of their children's abilities may be attributable to the fact that home-educated children are not subjected to continual testing and since they are able to learn in their own way, the extent of their knowledge often goes undetected.

Parental supplied data indicated that more home educated children fell within the early and late reading brackets than the norm. During the interviews, those children identified as non-reading 7 to 11 year-olds tended to be literary minded, enjoying literature despite their not exhibiting a need to read to themselves. Cross referencing reading attainment scores with preliminary data on the 8 to 11 year-olds from the psychological scales, suggested that such children were not unduly affected by their late reading. Notably, children from religious backgrounds often read the earliest: perhaps, the results of exposure to texts containing minimal illustration.

Overview

Tentative results suggest that the children assessed, demonstrated high levels of ability and good social skills. They appear to benefit from a curriculum tailored to their individual needs and from the attention given to them by their families. Love and security within the family, regardless of whether the family had one parent, two parents of the same-sex, or two opposite sex parents, positively contributed to the children's ability to learn, as did the absence of academic and peer pressures often associated with schooling. The opportunity to learn through talk was also contributory. The overall implication is that children may benefit from the self motivation that stems from greater parental participation in their learning process, a more flexible curriculum and an individualised educational programme that reflects their own interests.

A growing trend

In 1997 Roland Meighan suggested that there may be as many as 50,000 children receiving a home-based education throughout the United Kingdom. Now, in 1999 it would be this author's conjecture that 50,000 may be a conservative estimate. If numbers of home educators are, as the evidence suggests, increasing, then this may well be an indication that growing numbers of parents are uneasy with the present mainstream system in the UK.

The way ahead: a third way?

What has come to light during the research is that many parents home educated because they perceive it as the only accessible alternative to school. Often the decision appeared to be a compromise. The optimum, it appeared, would be for the third alternative, the 'third way in education', whereby each child could adopt a flexible curriculum suited to his or her individual needs, in-school, out of school or flexi-time by choice.

Paula Rothermel

This article is the result of research at the University of Durham by Paula Rothermel. Enquiries: c/o Mrs Anita Shepherd, School of Education, University of Durham, Leazes Road, Durham DH1 1TA:

☎ 01457 872 946 email p.bell@btinternet.com © P.Rothermel 1998

Home educated young people in Scotland submit questions to their local Members of Parliament

1. There are a lot more home educated children in Scotland than there ever used to be but many people still don't realise it is legal (and some are told it isn't!). Will you please tell the councils to give people the right information and not say in the newspapers that children must start school when they reach 5?

2. Since so many young people are now benefiting from home-based education, we think it's time that the government acknowledged the contribution made by families in educating their children. People who put their

children into nurseries, crèches and schools etc., get subsidised, while people who look after their own children get no help or encouragement. Why not?

3. As home educated young people, we are worried that we might have our rights infringed by truancy watchers. Home-based education means that we are often quite legally out and about during school hours and should not be made to feel like criminals. How will you make sure that our rights are properly protected from overzealous and/or ignorant officials?

4. Some of us are planning on doing qualifications to go to university in the future. However, it is much easier to arrange to do English or International GCSEs and A-Levels than Scottish Standard Grades and Higher(Still)s which seem to rely on compulsory internal assessments. How can Scottish qualifications be made more accessible to candidates like us?

5. Some of us might choose to go, or go back, to school but find we are expected to repeat work I books we have already done. We don't want to 'try the private sector' which some schools have suggested, so how can Scottish schools be made more responsive to the learning needs of individuals?

6. Some of us would like to try flexi-schooling - part time attendance with a proper contract between ourselves, our parents and schools. The law allows for this but there are only a few cases where people have managed to arrange it. How will you support young people under 16 in negotiating their own flexible learning programmes?

7. Some of us left school because of bullying and anti-social behaviour. We know about anti-bullying initiatives but some of us feel very stressed by the hostile environment in some schools and prefer to learn in a more relaxed setting. How will you support our choice as young people because we all have the right to expect to be educated in a safe, secure environment?

Source: Schoolhouse Home Education Centre, Dundee

Home-educating families in England and Wales might like to try these questions out on their MPs.

Useful quote from Tony Blair that can be used in letters:

"...the revolution in business...will, over time, take place in education, too. We will move away from a system that assumes every child of a particular age moves at the same pace in every subject, and develop a system directed to the particular talents and interests of every pupil."

(quoted by Michael Barber, The Guardian 30/1/96)

(Please let Education Now know of any replies)

Coming shortly...

Those unschooled minds

home-educated children grow up

by Julie Webb

This book is based on interviews with 20 home-educated adults. *"I wanted to find out what sort of lives they were leading now, and hear their reflections on the process of home educating."* Julie Webb hopes her discussions with these adults on their experiences, will have some fairly revolutionary implications for educational thinking.

Educational Heretics Press ISBN 1-900219-15-8 Price £9.95

Does an awareness of 'multiple intelligences' influence the ways you support the learning of young people?

One family, whose young children are being educated at home are eager to hear from others with a similar philosophy. *"We aim to develop all our 'intelligences' in a creative and flexible way... We believe that learning is a consequence of thinking, not learning facts, and that learning should include deep understanding which allows the flexible, active use of knowledge... This is the sort of thinking which will be needed in the 21st century"*.

Contact Julie Ashton on Tel: 01928 581172
e-mail: JASH40@aol.com

Information and Communications Technology forcing the pace of innovation and change in education

This *Learning Exchange* presented by Rod Paley and Paul Arderm, which followed the first, full meeting of members of *Education Now*, on Saturday the 24th April, attracted considerable interest. It was both informative and thought-provoking, and was greatly enjoyed by everyone present. In fact, informal discussions went on over refreshments for almost a further two hours after the planned ending of the day! Our thanks, once again, to Rod and Paul. We hope they had a good sleep on the train back to London - they deserved it!

A date for your diary

The next meeting for members of *Education Now* will be on **Sunday 26th September 1999**

This will include the AGM and a full meeting of members, followed by a *Learning Exchange* - theme to be decided.

Flotsam and jetsam

Thirst for knowledge

The miner's arms in Brassington, Derbyshire is one of the latest learning outposts of the University of Derby. Vice Chancellor Roger Waterhouse said, *"we take the product to the people. We are trying to serve the rural population."* Strong support comes from Chancellor Sir Christopher Ball, who sees the Campus University as an out-of-date 20th-century concept.

Brain drain

Ian Gilbert, director of the 'Independent Thinking Company', explains that, *"when people have choices, certain chemicals are released into the brain that aid thinking and learning... By contrast, when people lack choice and feel compelled and hopeless, the brain produces norepinephrine, which has a strong inhibiting effect, lowering morale and motivation and*

making learning inefficient." The government proposes to ignore this evidence, pressing on regardless with a new adult-imposed national curriculum.

Peace room in the war zone

Children as young as seven are able to seek relief from classroom stress in Liverpool through counselling, massage, and aroma therapy in a room staffed by professional therapists. After the calming effect of the 'peace' room, children are ready to return to the war zone of the classroom.

(Anticipated comment from 'William': *"it seems to me, daft to make the classroom a war zone in the first place ..."*)

League table disease?

A recent TV film was based on plot where a scheming father killed or incapacitated any rival that appeared in the classroom so that his son would be top of the class. Will any ambitious head teachers draw inspiration from this idea in the league table dog fight?

Learning direct

Congratulations to the Department for Education and Employment for their 'Learning Direct initiative'. *"Learning is not always like it used to be, in a formal classroom. Now you can learn how to do anything anywhere you choose: at work, at home, in your local community, at college."* Who can get 'Learning Direct' to help? Answer: adults and employers. Children are excluded. (See battery hen item below)

Battery hen update

The European Parliament has voted in favour of phasing out battery cages for egg-laying hens. No plans to do away with battery hen schooling have yet been announced.

Britain's unhappiest workers

Interviews with 7,000 workers annually during the 1990s show that public sector workers were generally happier with their lot than those in the private sector. The one exception was teachers. Researchers Gardner and Oswald of Warwick University concluded that this was to do with the conditions of work rather than pay.

Arthur Acton reporting

Education Now supporter and former head teacher Arthur Acton writes, *"I am horrified by what is happening in education... The school I go to as a volunteer says it is hard to fit in a person like me, doing drama, stories, and discussions, because of the national curriculum."*

The girl who refused to salute the flag

Mary Kait Dundee, a 15 year old school girl in San Diego County, California refused to salute the flag in the daily US classroom ritual. She was bullied by teachers, administrators, and fellow pupils. For seven years she had performed the ritual without a second thought. But then one day she began to think about it. *"I am not comfortable stating a flat-out lie that there is liberty and justice for all in this country. I personally think there is only liberty and justice for the powerful and rich... I didn't want a confrontation. But if I stood with everyone else it would contradict my principles and make me a weak person for going against what I believe is right... Unfortunately my school does not encourage independent thought or actions. Other students rejected me for my resolve."*

Spot the odd one out

"One of my year 11 pupils showed me this from his textbook. *'He brought back... Formal tests and examinations. He stopped 'project' work and he introduced a core curriculum in*

mathematics, science, foreign language, history and geography. Those who wanted more had to pay fees." To whom was this referring? Keith Joseph? Kenneth Baker? David Blunkett? No - Stalin." John D.Clare in Times Educational Supplement, letters, Feb. 12th.

Top of the League - Moneybags United

"Yet again the leafy suburb of Richmond upon Thames congratulates itself upon coming out on top in the primary league tables. The local state primary school is well funded with highly competent and committed teachers, yet about a third of the pupils have private tuition. What exactly is OFSTED measuring?" David Cadogan in Times Educational Supplement, letters, March 1st.

End game for reading?

American adults bought 13 million fewer books last year apparently because they see less need for the printed page.

Socialisation watch - update

Two students at Hadlow College, Kent who killed their friend were convicted of murder... A teacher and 12 schoolchildren were killed in a Denver High School by two members of the school who then killed themselves... In Canada a 14 year-old boy has been charged with murder after he shot two fellow students in the local high school... Up to 20,000 UK students per year are suspended for drugs and drink offences... 40% of US pupils think a fellow student is capable of murder; only 42% said they felt safe at school.

McLibel watch

Dateline 31st March 1999: the 'McLibel Case' Court of Appeal verdict is given. Helen Steel and Dave Morris had the damages they are asked to pay reduced by £20,000 as the judges ruled that the two campaigners had been correct in stating that "*if one eats enough McDonalds food, ones' diet may well become high in fat, with the very real risk of heart disease.*" The judges had considerable sympathy with another statement that "*there is a respectable (not cranky) body of medical opinion which links a junk food diet with a risk of cancer and heart disease.*" The judges ruled that it was fair comment that McDonalds employees worldwide "*do badly in terms of pay and conditions.*" For some reason, McDonalds welcomed the verdict. The case is to go to the House of Lords for further appeal, so the McDonalds 'PR disaster' is not yet over.

Educational Beachcomber

Book Review

The Homeschooling Book of Answers: the 88 most important questions answered by homeschooling's most respected voices

by Linda Dobson (ed)

Prima Publishing, P.O. Box 1260BK, Rocklin, C.A. 95677.

£10.99 ISBN 0-7615-1377-9

(Available in UK from HERO Books, 58 Portland Road, Hove, East Sussex, BN3 5DL £9-89 plus £2-50 postage and packing.)

As their children come home from school more and more stressed, confused and generally dysfunctional, I imagine the idea of homeschooling comes to the mind of many parents, but they do not pursue it because it seems simply impossible. They have learned from generations of professionals that ordinary mothers and fathers don't know enough about the subtleties of child psychology to give their children an education comparable to that which they would have received in school. So they continue to send them there, and put the symptoms of educational disaster which they display, down to naughtiness or nature.

This book could be the beginning of a new era for that silent community of despairing would-be homeschoolers. It is American, and none the worse for that, and it contains large lists of American contacts and organisations together with chapters on the problems which home-schooling families might encounter in various States. These might prove useful to families who can use e-mail to enlarge their network of friends and collaborators, but the main meat of the book is in the central sections.

Read by themselves, without the specifically American material, these sections are worth the price of the book. A panel of people who have, collectively, a vast experience of homeschooling, give their own answers to precisely the sort of questions parents ask themselves when they begin, tentatively, to think about taking their children out of school (or not sending them there in the first place). These people, who include such luminaries as John Taylor Gatto, twice Teacher of the Year in New York State, are a high-octane mix of educators, parents, teachers and – still uncommon even in this kind of book – children.

The answers they give are marked by a most unusual freedom from the need to treat schooling as an equal partner in the educational process. Cafi Cohen, a homeschooler on the West Coast of America, dismisses the old-fashioned schoolhouse pungently: '*If I were to design an environment to enhance my children's ability to function socially, I would never propose anything resembling school*'. So much for the classroom as a training-ground for real life!

The current sacred cow of British education, testing children every ten minutes to see if their teachers are working hard enough, receives an elegant kick into touch from Susan Evans, a homeschooler from Michigan. "*Over time,*" she says, "*it's become apparent to me that, for the self-directed learner, tests not only waste time and break the flow of inquiry, they miss the whole point of seeking out and internalising information and knowledge.*"

And as for the elaborate staging and structure so popular with ministers and inspectors, John Taylor Gatto, who was himself a schoolteacher for many years, brushes it aside without mercy: "*...I can say that after thirty years of classroom teaching, I'm utterly convinced that every single stage theory of child*

development is dangerously flawed; 'dangerous' because all of them suggest, overtly or covertly, that unless the abstract sequence is followed great harm will result... That is nonsense."

Together with these more theoretical matters, there is a treasure-house of practical information, not only about how to create a rich learning environment, but also about how to live and work in it with children. Linda Dobson devotes a whole chapter to showing that even families with few material and financial resources can give their children an education which is inexpensive without being 'cheap and nasty'.

John Taylor Gatto goes one better and points out that in his opinion: "*Textbooks...have been for at least a half-century and probably longer, creations of publishers or ambitious academics, written not for children but to please textbook adoption committees.*" In other words, use what helps your children to learn, which may be anything from a library book to something you found in the attic. Texts are important, not their format or the programmed questions and exercises they might contain.

Much of the book is devoted to reassuring homeschoolers and confirming that the feelings which made them look into the possibility of homeschooling came not from some brainstorm or March madness, but from their best and strongest parental instincts. It is not a book to be read from cover to cover at a sitting, but a guide, best kept in easy reach and referred to whenever the need arises. Its tone is unfailingly optimistic, creating a strong impression that the battle to get homeschooling recognised as a superior form of education is all over bar the shouting. That may not yet be true in Britain, but this book will help to make homeschooling families more confident and better able to confront LEA visitors on equal terms.

Chris Shute

© Education Now Publishing Co-operative Limited 1999,
113 Arundel Drive, Bramcote Hills, Nottingham NG9 3FQ

Membership of *Education Now* costs £20 per year. In return members receive four issues of *News and Review* and information about new books and *Learning Exchange* meetings

No part of this newsletter may be reproduced without prior permission from the publishers. While all reasonable care has been taken to ensure the accuracy of this publication the publishers cannot accept responsibility for any errors or omissions

Printed by Mastaprint

“

’The Sankofa Learning Centre

“

“

Sankofa is not much like a school. Schools stand out from the

9

landscape. Often built in the style of an uneasy compromise between a country house and a barracks they announce to the community that they are there for a serious purpose, to hand on an established culture and to mould the thinking of a new generation. The Sankofa Learning Centre prefers to keep a discreet distance and wait for learners to seek it out.

It occupies part of the second floor of an office building in South London, which it shares with a number of companies which have nothing to do with education. The centre is furnished like a typical office, with the usual array of computers, utilitarian shelving and utilitarian furniture. That is not to say that I found it unwelcoming. On the contrary, I was made very much at home by the teacher in charge, a young black man.

He explained to me that the Centre was an attempt to help black children become confident, well-motivated members of society. He knew that many black youngsters fail to thrive in mainstream schools, and it seemed to him that this happened because much of the culture black children were exposed to in English schools was, in spite of superficial multiculturalism, white and Anglo-saxon. It presupposed that educators would always tend to present that culture as an ideal to be striven for. Inevitably, children whose home-culture was Afro-Caribbean, and whose experience of white, Anglo-Saxon culture was coloured by the racism which is part of its general context, often found themselves at odds with traditional schooling, not because they rejected it root and branch, but rather because it was not always accessible to them or in harmony with their natural outlook on life.

To remedy this failing in the education of young black people Sankofa has adopted a strongly Afro-centric approach to education. Perhaps the most vivid example of this was a lesson which I could only watch through the door of the room in which it was taking place. Eden, the teacher in charge, apologised for this restriction, but explained that my going into the room would break the spell of concentration which the teacher had clearly managed to cast over the group of youngsters he was talking to.

The teacher was a tall black man who radiated authority, and was able to talk to his group of teenagers with a dramatic dynamism which held their attention for much more than the ten minutes or so I was always told were the limit of children's ability to listen to the spoken word. I was watching not an English teacher doling out the National Curriculum in lifeless penny packets, but a 'griot', a tribal remembrancer, engaged in the vital duty of building into the minds of the next generation a vibrant image of the community they come from and the values they have inherited by being born as what they are. The teacher talked about living as black people in a white society, about the skills they would need to make a success of their entry into adult life. Although I could not hear what he was saying I could see that his teaching was more than a dry lecture. He was clearly part of the tradition of rhetoric which has come down to modern times as the half-spoken, half-chanted sermon of the black evangelical preacher, supported and encouraged by a congregation which alternately urges him to 'preach it, brother', and endorses the preaching with loud 'amen's and 'yes, Lord's.

I was immediately impressed by the readiness of the Centre to look for new ways to communicate, ways which work even though they seem to run counter to the ideas which lie behind English pedagogical thought. Education can only evolve if at least some of those involved in it feel free to move outside the framework of thought sustained by 'professionals' and teacher-

trainers.

The aim which Sankofa sets itself is comprehensive and utilitarian: 'Preparation for adulthood'. The eleven or so youngsters who come here for their education represent a small but vital fraction of our future. They are the black British who will not allow themselves to be marginalised or pushed into a subservient role decided for them by whites on the basis of their skin-colour rather than their real abilities. The Centre is about empowerment and confidence as much as it is concerned with teaching. It has qualified teachers who teach traditional subjects, but it can also call upon parents and friends who share their skills with the children. In this way the students of Sankofa meet and learn from people who represent a wider community than schoolteachers can.

A professional footballer happened to be in the centre on the day I visited it. I saw him talk to a student who hoped to be a footballer himself about the reality, not always glamorous, of playing for a serious football club. I was impressed by the readiness of the whole centre to make a place in its life for anything which might engage the students' interest. Schools so often restrict the spontaneity of ordinary life by insisting that the outside world present itself to the students by appointment, as part of a course of study, or to stimulate discussion among the older ones in the context of 'General Studies'. This is probably inevitable, since traditional schools have no choice but to define their purposes very broadly, concentrating on general teaching rather than particular interests. It is hard to imagine how a large comprehensive could be expected to disrupt its highly organised programme to allow a visitor to speak to a small group of children 'on spec.' about something which might enthuse them. Yet this is often how individual young people discover their true vocation in life.

Centres like Sankofa often look to the outsider like a 'soft option'. It opens for about four hours a day, and there are no lateness monitors at the door or rigid controls on what students wear. There is none of the pressured, bell-regulated, organisation which so often causes unrecognised stress in schoolchildren, stress which can contribute to the genesis of anti-social behaviour and even mental illness in later life. There are formal lessons, of course, and homework is set, but the small number of pupils allows tasks to be set in consultation with the learners themselves. This is a clearly better than the setting of a single task, to be completed in exactly the same way by all the learners. Individualised tasks engage the learner's interest directly because he or she participates in creating them and in deciding how they will be assessed.

This relaxation of traditional modes of teaching and supervising learners, far from producing young people who cannot control themselves and who refuse to learn, seems to empower them to take their own learning seriously. Certainly during my short visit I found none of the febrile ducking and weaving to avoid work which is so common in State schools. Sankofa was not adding to the number of young people who see learning as collaboration with an authoritarian enemy.

All in all, Sankofa is about children and young people who are black, British and able. It has established a method of education which meets their needs, rather than those of the administrators and politicians.

The Lighthouse Learning Centre

I was a schoolmaster for some 25 years. I am used to primary schools and what they think of as education. I recall one sunny September morning watching some new five-year-old pupils coming into their first Infants School assembly. They were absolutely normal - curious, active, chatty, full of the almost frenetic compulsion to do things, to test their surroundings and find out more about the world in which fate had so recently decanted them. If any human activity could be called 'blameless' it was theirs. Of course, they had to be curbed. You cannot organise twenty or so living experiences of heuristic learning, (at least, not so as to ensure that they all arrive at the same, predictable conclusion), so the Headmistress, our senior and presumably most advanced educator, set about bringing order into their lives. "Now, children," she said, kindly but firmly, 'we're in big school now. We don't talk and move about any more. We must learn to listen and pay attention to what our teachers have to say." And so, like the good children they all wanted to be, the new generation set about playing the game of schooling.

The Lighthouse Learning Centre has a different agenda. It uses a large, old-fashioned house in Brighton, a rambling network of rooms answering to the needs of a more spacious age than ours. As a child I loved exploring labyrinthine buildings, and I don't imagine the dozen or so regular attenders at the Lighthouse are much different. Childhood was never intended to be lived out in a place where all the lines are straight and every new room you go into is a clone of the one you have just left. The Lighthouse Centre offers every child a chance to build a private mental world out of its rooms and spaces, some large enough to hold the whole community, others intimate enough for two or three to play together, or for one to think alone. There is an amiable absence of briskness and adult order: things are not, by and large, lined up and labelled to teach the little ones to be tidy. On the other hand, I detected none of the tension and even simple nastiness that sometimes infect more adult-centred places of education.

The Lighthouse Centre is an experiment in educational living. The children who go there receive education, certainly, but the Centre expects their parents to supplement its programme with their own ideas and concerns. It offers as much social education as teaching, and the children respond by conducting their relationships with the people around them with as much thought and care as they do their studies. Many of them approached me with a refreshing frankness, not intimidated by my large size and unfamiliarity.

The Lighthouse day tends to begin with a meeting, held in a pleasant little room which, I imagine, was the front lounge of the house in its incarnation as a family home. The children are all pre-teen, some as young as five or six. On the day I visited them, the meeting was a quiet, gentle affair in which I introduced myself and spoke for a few minutes about what I was doing there. A small boy had approached me and asked me, with perfect courtesy, to account for myself. I used the meeting to assure him, and the other children, that I was not some sort of inspector, looking for things to criticise. On that understanding I was welcomed into the life of the Centre.

The Meeting resolved itself into a little lesson, given by one of the adults present. A poem was displayed whose words were arranged so as to suggest what the poem was about, and the children were encouraged to write poems in the same manner. I joined in, sharing the creative *ã*lan of the group. The emphasis was on encouragement and freedom to choose how the work was done. Some of the children wrote a little and surrounded it with colour. One boy made up a long, serious piece with a lot of dramatic vocabulary in it, which he spent a good deal of time refining and illustrating. Everyone worked sensibly, without wasting other people's time or, as far as I could see, trying to avoid the activity with outbursts of diversive trouble-making. An inspector might have criticised the relaxed, uncoercive way in which the group worked. He would certainly have wanted to see more 'structure' and adult control. Frankly, he might not have been impressed, as I was, by the children's self-possession and confidence, unless he had learned to focus out of the immediate situation onto a broader view of education which values the space between grown-up interferences in children's lives as much as it does those moments when adults are securely in charge and directing what goes on.

There was a lot of activity and pleasant interaction during the day. Some children worked in the garden, digging and planting. Others drew and wrote, worked on the computers and chatted amiably. Some read. At one point I found a 'Mr. Man' book in French, and started to read to the children who happened to be sitting round the table. I remembered that my own interest in French had come about partly because when I was a youngster listening to the request programmes on the radio, I had heard Charles Trenet singing 'La Mer'. I had been intrigued by the idea of a language which was not my own, a strange mixture of sounds which meant nothing to me, but were the natural way in which millions of people carried on the business of their lives. I thought I might just possibly intrigue one or two of the children in the same way.

I used plenty of gestures and graphic intonation to try to convey a little of the meaning to the children. They listened with attention, and seemed to accept the challenge of trying to understand a story in a foreign language. I felt that there was none of the bewilderment and even resentment I have often encountered when I have used a language children could not understand. I was particularly impressed with the self-possession and confidence the children constantly showed in their reactions both to me and to each other.

After lunch - a pleasant vegetarian meal cooked on the range which stood next to a work-table in the kitchen - we went to the local park. This was delightful. For a long time I have been feeling more and more sure that children need play as much as they need food and drink. Perhaps the greatest crime that schools commit against their pupils is the message they send to them from their earliest years that play is an inconvenient necessity, which has to be fitted into the day because children would go mad if they were not allowed to do it sometimes, but which is in no sense equal in value to Real Work such as maths, English and the like. At the Lighthouse play is important and its value recognised. Indeed, it seemed as if work moved into play, and play into work mostly without interruption.

The Lighthouse Centre offers a clear, gentle but lively vision of child-friendly education, in which the individual can pursue in safety his or her unique view of the world

'CAVE

““

CAVE -Community And Voluntary Education - works out of a Georgian house in South London. It calls itself a school, though not because adults wanted it to have the name, but because when it was founded the young students decided that they wanted to take their education seriously, and to them that meant coming to a school, not some alternative and non-standard place which might have made them feel singled-out and special in an unfavourable way. It is a learning centre for young people who have found ordinary schooling unhelpful for some reason.

So much for the name, rank and number. I found CAVE a pleasantly un-school-like place, well adapted to the needs of the year 10 and 11 pupils it serves. Its purposes are at least in part the same as a school's: to prepare students for public examinations and to give them skills which could allow them to find a job. But it also sets out to introduce them to the more practical realities of life, the outwardly straightforward business of getting on with other people and cooperating together, which is so often harder than it seems, because it calls for a repertoire of social skills which young people don't always possess.

My visit happened to coincide with a meeting of the community, presided over by one of the students. Young people do not find formal meetings easy to attend. Teenage is inevitably a time of competition. People who are not yet quite adults, but who are no longer children live in a social world shaped by their shared uncertainties about how much of the patrimony which will one day be theirs they can hope to possess now. By common consent the best way to settle that question is to make every piece of social interaction, however trivial, into a declaration of independence. It is natural for young people to accept nothing on trust, and to concede as little as possible even to others of the same age, still less to 'authority'. The students worked through the agenda with as little apparent enthusiasm as they could muster. The teachers seemed undaunted by this, and moved matters along patiently, cajoling and gently challenging the students to start taking responsibility for the decisions which would shape their lives. In the end, the work of the meeting was carried out successfully. I did not sense the despair which often descends on teachers when they try to hold meetings with teenagers. The students were committed, in the last analysis, to their own education, and to making a success of their lives.

CAVE is not a soft option. Learning is an important part of its programme. The students study for GCSE examinations, and produce work of good quality. One boy showed me a substantial folder of work which he had done, and which was clearly important to him. The Centre has computers, printers, multi-media facilities, everything which could contribute to making knowledge easy to assimilate. There were also plenty of books, and the students were encouraged to read widely and have opinions.

Unlike many learning centres, CAVE does not take in all comers. The students are referred to it, and selected so as to make up a balanced community, with a harmonious mixture of males and females, races and ages. They come to CAVE because they have met with problems in ordinary school. Some have been overwhelmed by the sheer weight of emotional and

academic pressure which schools lay upon their clients, without considering whether or not they can bear it. Others have had more or less serious problems with either the Law or some aspects of life in a complicated modern society. All of them have this in common, that CAVE was able to respond to their natural adolescent needs without having to think about how they might disrupt the machinery of a large school.

The students work in an atmosphere of serious learning. The range of books and materials available to them is large and varied, and there is a computer. A normal school might have provided them with more equipment or newer books, but not, I suspect, with the support and understanding which would have enabled them to profit from it. The calculus of personalised learning sets an adult preoccupation with the appearance of things against the vivid, experiential activity of the young learner, and in the case of CAVE, comes down clearly on the side of the learner. “