

THE CASE FOR CHANGE:

“Do not train children to learning by force and harshness, but direct them to it by what amuses their minds, so that you may be better able to discover with accuracy the peculiar bent of the genius of each.” Plato

‘The Joy of Learning’ Title of the autobiography of L. C Powys, former headmaster and advocate of nature and outdoor learning

- 1. Identifying what we need to change**
- 2. One hundred questions**
- 3. Building a new paradigm**
- 4. Action Points**
- 5. The transformational paradigm and the future paradigm - summaries**

In plotting a new curriculum there are key issues to consider, primarily the place of technology and environmental and ethical issues, but also the question of what education is for. Some of the areas identified will be contentious, such as whether we over-stimulate children through over-resourcing at certain ages, whether teacher assistants are used in the way they should be used (and whether we need so many) and whether we have got special needs provision completely wrong, but with new algorithms offering us different ways of doing things, the social and academic pressures being placed on children and families, the availability of almost any course on-line and the need for education to become embedded as a life-long habit that is not restricted to schools and universities, it is time to raise them.

Identifying what we need to change: Since the National Curriculum was introduced in 1988, it has undergone a number of reviews as it has grown and morphed in response to numerous social and academic (mainly assessment based) pressures with curriculum reform often lagging behind.

The Dearing Review in 1994 identified the need to slim down an already over-burdened curriculum and the following year the curriculum was put on a new care plan followed by another five years later, in 2000. In 2008, after eight years of greater stability, partly due to New Labour's extra funding between 2000 and 2010 (£40 billion - £80 billion) another review took place (The Rose Review) which proposed yet another new care plan having identified excess content and lack of flexibility as the issues that needed to be resolved. The next review (yes, that happened this often) was by Tim Oates in 2011 and recommended a clear distinction between the national curriculum and the "whole curriculum as experienced by pupils in each school" .

Since then the curriculum has continued to groan from ever greater pressures, from government with PREVENT and British values, from curriculum groups, but mainly from the huge demands placed on it by safeguarding and compliance, so that the curriculum per se has been overshadowed by the other demands – mainly social and pastoral – that have been placed on schools.

These, in no particular order, are areas we should seek to change:

a. We need a revolution in thinking and a new paradigm for education. It is not about just changing school cultures or curriculum, but introducing a new philosophy for education

b. We need to change the mindset of society towards education. How do we make children, students want to learn, get excited about learning, find a joy and purpose in it? (and it isn't by sitting countless mocks and exams). In the third world there is an appetite for learning compared to the apathy that is prevalent in the first world, where in some countries and sections of the population, education is a chore, the curriculum is irrelevant and schools and teachers viewed as adversarial. Giving education value is important and to do so, it must be challenging, informative and relevant. Education is ongoing and will need to be accessed throughout one's life, more than ever before and children will need to own their education

c. To make it so, education needs a more coherent political voice and a commitment to better funding and support. There are question marks over the widening salary gap between Heads and their staff and examples of inefficiencies, but that shouldn't blind us to the fact that the sector and the profession is undervalued. We need to ensure efficiencies in what we do (there has been huge waste in technology, in particular), as well as through the way we structure and staff our schools.

d. We need to see schools differently as they take on more and more social responsibility. Educating parents and the holistic education of families is important, but crucially we need to look underpinning our curriculum with an ethical and moral code which should include our place in nature (environment and conservation), in the community and family; and in society at large.

e. We need to separate the diverse functions of schools and ensure we use teacher's time more efficiently. Schools are now serving a different function from thirty years ago, from providing nourishment and care and support that used to be the preserve of parents, from the exacting and costly demands of compliance and safeguarding, and from all the extra demands placed on them by league tables, by technology and by government.

This would involve looking at the structure of the school day and identify the provision required, and broadly, whether it be social or academic and therefore, who is best equipped to provide it.

f. We need to revisit the area of social education and PSHE including sex education, issues relating to LGBT, cyber issues (bullying, narcissism etc) with readiness – physical, emotional and psychological – in mind. We are getting them to make decisions that will them throughout their lives at the time when they are going through adolescence with all its myriad challenges of self-realization and self-actualization.

g. To achieve this we need to focus on attitudes, manners and behaviours at the very start of the school process, on focused engagement and the quality of teaching and learning. We need to emphasize that discipline, routines and structure are crucial to maximize learning. This requires a reversion to more structured, more focused and more defined classroom teaching for part of the primary years.

h. We need to make education relevant to the students and their world, but we have to ensure we keep what is valuable and necessary and only change if it improves what we teach. While literacy and numeracy are quite well-defined, much of what else we do is losing relevance. Teaching certain historical or geographical topics because we have always done so and have built up the resources to enable us to do so, negates the question, ‘what is the best education we can give our children?’ – a question that elicits different answers over time.

i. We need to teach sustainable education. A good education should consist of knowledge and skills, a grounding in literacy and numeracy skills and the development, over time, of an independent learner with the skills to cope and a positive attitude towards education. This is crucial – the ability to learn without props and stays. While knowledge is the basis of learning, we need to be much more exacting in establishing ‘what knowledge’ we choose to teach and what we need to commit to memory. Too much ‘knowledge’ (and economics and history are good examples) need to change significantly and other subjects need adjustments as science is required to do frequently.

j Education should also impart a sense of purpose - community, charity and good manners are best able to be learned by teaching children to look outwards, not inwards. Instead of focusing on self-esteem and resilience, buzz words, dangerously so, we should focus on self-respect and encourage

the benefits of a good work ethic and the value of perseverance.

(i)

k. Any new curriculum should adhere to the principle of readiness at all levels of education. The idea of more, earlier is misleading and potentially damaging. This mitigates against any early selective schooling. The idea of selection by schools needs to be challenged and countered by discussions about the semipermeable membrane that is possible with setting and streaming, judiciously done and constantly reviewed.

l. We need to bury such terms / concepts as growth mindset, critical thinking, soft skills, multiple intelligences etc as well as meaningless debates (skills vs knowledge) and self-evident suppositions ('that children need to know failure'). These should all be implicit parts of good learning and teaching.

Fragmentation has been the enemy of education and has allowed a huge industry to grow up alongside schools; we need to strip away the jargon and have a clear focus on what we want to achieve.

m. It is clear that the implantation of technology into education has met with very mixed success so far. What is clear, however, is that the availability of properly accredited and resourced courses on-line will play a significant part in the future. Blended learning, personalised learning with individual learning schedules, digital textbooks, communities of online learners etc will become the norm, but need to be shaped. We can already access the best universities in the world on-line and there is no reason why any student in the UK cannot access any A Level course at any school. We need to think of schools (as well as classrooms) without walls

n. Blended / seamless education increases the need to integrate more externally-provided courses into our schools (possibly in the manner of correspondence schools models used in other countries) No school should be limited by what they can offer in today's world with a range on excellent on-line providers.

o. We need to overhaul assessment and make it a tool of education, not a goal operating for its own ends. We need to recognize its failings and its serious limitations and work to make it less visible. League tables have had a deleterious effect in this regard. We should not jettison exams, merely reduce them and define what they are telling us – which is not always as much as we think. Specifically, we need to place less reliance on early assessment and data and take much more account of the individual characteristics of the learner. We consistently under teach because the preponderance of assessments that when over used constrain learning. There should be no data accumulation out of schools until age 8yrs minimum

p. We need to look at the role, status and training of teachers. This role will change away from how it has evolved over the last decades to focus on its core roles, such as teaching, acting as mentors / tutors for e-courses and as facilitators and supervisors. Teachers will need to constantly up-skill on ways of accessing and sharing knowledge and the importance of communication, but not through expensive and ‘feel-good’ CPD courses run by gurus – of which there are too many. To do this successfully, the profession needs to demand higher standards on entry (not just academic) and to be funded properly.

q. We need to look at all school employees especially those with responsibility for children in the classroom and evaluate their contribution to children’s education. IT may be that the role and function of some staff groups (pastoral support/ teacher assistants) needs to be redefined so they are used more effectively.

r. We need to take mental health seriously by looking at the causes and ensure that education is worthwhile and purposeful, that mindfulness and well-being are implicit and not explicit outcomes. The focus should be on causes and prevention. Sex and relationship education and well-being need to be implicit as well as explicit parts of a new curriculum – at the appropriate level.

- s. We should be mindful of what employers are saying (particular complaints about poor literacy and numeracy skills) and look at what is required in the future to assist children, but we should not ignore the wider purpose of education to make children well-informed and with a breadth of interests and knowledge.
- t. We need to involve parents and the wider community in the education of the young ('it takes a village') At present, there is an educational divide between the hyper-connected world of the young and that of both families and education providers. The issue of parenting and wrap round care should not be left for schools to deal with on their own
- u. Too often, the way we measure and promote success is by exam results or, later, by what someone is worth or earns rather than measures such as service, value to the community and social worth. While that is changing with charitable giving, and increasing philanthropy (although Britain still lags behind the United states and the rich fall behind the poor), we need to work on promoting the value of community and of working collaboratively.
- v. As society changes and knowledge grows exponentially, we need to look at new skills and competencies although these should be implicit in all we do. Nanotechnology, genetic and biological engineering, new apps and algorithms are altering our ideas of what is possible, in education as elsewhere, quite dramatically and we need to ensure that the education we offer is open-minded as well as open-ended.
- w. We must build on the excellence of teaching in the vast majority of our schools and the foundations that are already in place. Teachers and children deserve better from government and their education officials including a clear, coherent vision and framework, free from political interest and the vested interests of those profiting from education. We need to raise the

status of the teaching profession and provide more contact time with students and stop blaming schools for societal failings.

x. As of January, 2017, there were almost 16,000 pupils on-roll at pupil referral units – and another 22,000 in other local authority alternative provision. This number is growing rapidly and some local authorities cited rises of 300% in excluded pupils last year. More targeted, blended education must be part of the answer, but causation and need should be acknowledged and needs better met in the new curriculum

y. Selective education has many drawbacks, including the practice of excluding students who may affect results and therefore a school's standing. This is a widespread practice in SATs and GCSEs where students are either not entered or become 'invisible' or off roll or at A Levels where some students are barred from entry because of their potential deleterious effect on a school's results – all quite unacceptable.

z. Rather than more class time, at KS2 and KS3, we could look at giving less time over to formal study, (mornings only) and the afternoon to selected and specialised studies. It is the quality of the engagement, not the quantity that is of paramount importance. It may be that five days of morning schools focused on learning be developed as distinct from a more bespoke afternoon using work / vocational / academic courses provides a better form of blended education.

A. While many subjects (as stated above) need a major overhaul, there is also a larger question to answer as to whether we should be teaching by subject in the same traditional way especially in light of constant demands for more 'subjects' (financial management, philosophy etc) to be included in the curriculum - we should be looking at subject boundaries especially at KS2 level.

B. Up until age five years the curriculum should be given over to developing attitudes (including towards health and physical fitness) and general skills / knowledge (ie listening skills, place, time etc) and creative subjects, especially music and art. Up to age 10 should be focused on literacy and numeracy and general studies and core skills in mathematics,

literacy and reading should be firmly embedded at this stage of children's education. The use of SATS should be reviewed.

C. The future is in holistic and whole-family education and in life-long learning. This is implicit on schools now, but without the resources, staffing and funding to allow it. More work needs to happen with parents / carers to engage them and to encourage them back into education also. We need to counter the emphasis on self with a greater focus to community and extended family

D. Discipline, organization, rules and expectations are required in any system and there should be much higher expectations placed on children; to achieve this will depend on changing children's attitudes to education and ensuring what is offered is relevant and that its importance is self-evident

E. We need to critically analyse the place of technology in delivering education and provide better training for teachers in its use. This has been the greatest area of waste in education in the last twenty years for no discernible educational benefit.

F. Calls for more teaching of PSHE and character education as part of the curriculum are not the answer. Such messages / values must be an implicit (not explicit) part of a school and start in early education, in a revised curriculum, in its values and assemblies.

G. We need to change the language of examinations and the importance we have placed on them through League tables which has led to a drip-down stress and anxiety. There has been a proliferation of language, glossaries, acronyms, a constant stream of 'must-read' books on education and parenting that have blurred the landscape.

H. We need to embed attitudes and values about conservation, sustainability and the environment as part of our teaching of ethics and values. As I state elsewhere, what is the point of teaching about glaciers if they all disappear which we ignore environmental issues. This should lie near the heart of a new curriculum in the lower school.

I. This list will grow and redefine. It can only cover the broad principles which include the thesis that education, at its heart, is simple and should always be based around the question, ‘what is the best education for my child?’ That we have lost.

J We need teachers to be more involved in decision-making and be more political. Teachers need to have a voice in helping to determine future strategy and direction by contributing more to the national debate.

K The mobile phone provides one of the great challenges to education – whether to absorb it and use it or whether to keep it at bay. This debate will evolve as technology evolves and any new curriculum dare not ignore it

(i) In his book The Global Achievement Gap, Wagner identifies seven core competencies every child needs in order to survive in the coming world of work which are critical-thinking and problem-solving; collaboration across networks and leading by influence (which requires creative problem-solving skills and a clear ethical framework); agility and adaptability; initiative and entrepreneurialism; effective oral and written communication; accessing and analyzing information; curiosity and imagination.

One Hundred Key Questions:

1. What is the best education we can provide our children?
2. How do we change the culture of schooling?
3. How do we develop a new philosophy for education based on citizenship rather than academic performance?
4. How do we change attitudes towards education ie replicate the 3rd world hunger for learning amongst that growing number of children who are not engaging with the curriculum we offer, an education predicated on academic success with university the desired end point?
5. How do we get education back into the heart of all communities?
6. How do we make education relevant to all

7. How do we inculcate a joy of learning, a desire to learn and a non-adversarial approach to learning amongst our children?
8. How do we achieve a better match between what schools are currently teaching and what employers and universities are seeking?
9. Should we be attempting to bridge this gap so?
10. Where is our education system failing?
11. How do we separate the curriculum from all else that schools have been asked to take on?
12. Is our current model of SEND fit for purpose? (i)
13. What benefits do Teacher Assistants bring? (ii)
14. Do we use our resources and funding wisely?
15. Are our schools properly resourced, but not properly managed?
16. Do our schools reflect the values of our society?
17. Where should our schools be teaching about sustainability, conservation and the environment? (for teach we must!)
18. How do we underpin our teaching with ethics which are so necessary with AI, but also in our society, in the professions, in politics, in the way a civil society should work?
19. Where are we looking to accommodate AI in our teaching?
20. How will the block-chain impact upon education?
21. Should we change the school day and start later?
22. Should we use the first hour (8.30am-9.30am) for fitness, debate, cultural groups before a three hour learning morning?
23. If the 3rd world approach to teaching literacy and numeracy works better than all the alternative methodologies we've used, why not revert to it for KS2?
24. Should we teach the traditional range of subjects at all levels?
25. How much has our dependence on data and research, and the education industry that it has helped foster, affected our schools?
26. How do we take the overt 'business' model and the competitive (school on school) out of education?
27. How do we ensure school is still relevant to all children and engages them?
28. How do we teach children the joy of learning and encourage a sense of purpose in their approach to education?
29. Is the purpose of education changing from preparation for work or for life – and is there a difference?

30. How do we develop a social contract between schools and parents (schools and society?) A key question.
31. How do we amalgamate the traditional functions of school with the demands of society in terms of health, nutrition, care?
32. How do we make schools a resource for whole communities and not just children?
33. In teaching numeracy and literacy, have we found any better way than traditional teaching, with repetition, memory, rules
34. Do we enter children too young into formal learning?
35. Is it the cost of change (resources, etc) that has held back curriculum change? (i.e. subject areas such as geography, economics and history?)
36. How will blended education be the future?
37. Are well-being and mindfulness encouraging children to look inwards rather than outwards, i.e. are there risks in focusing on making children more 'self-aware'?
38. How do we develop an academic pathway that is not geared towards university?
39. How do we teach languages (if we need to) and if so, what languages?
40. How do we ensure that ALL A Level / IB courses are available at all schools using e-learning?
41. How do we change legislation regarding internships and contracts?
42. How do we manage assessment? Formative and summative, amount of testing, use of test data, etc
43. How do we go about developing individual curriculum areas that are held back by regressive thinking, habit or resources?
44. How do we go about transferring banks of traditional knowledge over to AI and focus on new knowledge and retrieval skills?
45. How do we approach / use / integrate mobile phones and other new technology?
46. How do we make schools community centres for life-long learning?
47. How suitable is our teacher training?
48. How do we reduce the dogma and ideology from education on focus on children?
How do we reduce the administrative load on schools?

49. How do we develop civic values?
50. How do we get away from binary debates (knowledge rich, evidence informed approaches,
51. How do we teach children how to learn
52. Fewer formal assessment points
53. How do we encourage children and adults to start designing their own education from the best schools and universities
54. If the top three skills needed in 2020 are complex problem solving, critical thinking and creativity, how are we developing them?
55. How do we teach children to become timely and continuous learners How can we address social policy without a commensurate review of social policy not that the two have become so inter-twined?
56. How do counter the dramatic fall in secondary school art teachers (22%)?
57. Should we be pushing for fairer and more consistent examinations (IGCSE vs GCSE, A Levels vs PreU)?
58. Are university predictions still necessary – or can we change the system?
59. With 1:4 children in England and Wales having received private or home tuition, how do we overcome bias and advantage in selection (ie get rid of selection)
60. How do we address the idea that knowledge is boring (it is not, except if delivery makes it so)
61. With 14% children with some SEND, should we push harder for more inclusion?
62. How do we manage technology without walls and the mobile phone in particular? (use it or abuse it?)
- 63.

Notes:

(i) *'All schools that claim to help alleviate or extinguish word blindness or innumeracy are still offering patent lies. . . . the lesson given to dyslexic children is more work, extra writing, remedial reading, more numbers . . . the utter abysmal cruelty of this has never occurred to the teacher. . . . It has nothing to do with the difficulty or uniqueness of*

dyslexia. It is all about the inability of teachers to think outside their narrow, one-way street of learning. 'I say and show, you see and hear and learn.' A A Gill

Learning support: Are we getting this right or is more governed by our examination system and what and how we assess and grade students rather than about what is their best education. There are plenty of critics who feel that we deal with learning difficulties the wrong way. Certainly, we should not need specialist support with writing, spelling, reading for many of our children, but fear of litigation, parental pressure and an industry that promotes itself needs a reappraisal in light of what we know about how children learn, how we measure learning and the use of new algorithms. Currently the system is geared to those who can access support, get extra time etc and not available equally to all, as figures from state and independent schools would suggest. (appendix i)

b. Teacher Assistants. All the evidence suggests that the very significant numbers of teacher assistants Between 1995 and 2000, the number of primary teaching assistants increased by 48% when they totaled 79,000. By 2015, they had reached 243,000 and by 2017, 265,000. In 2017, Schools spend approximately £4.4bn on support staff, which equated to 13% of the education budget.

Classroom teachers reported that teacher assistants helped to reduce stress, workload and disruption in class as well as acting as an “informal teaching resource for low-attaining pupils”, to supplement the work of teachers. There is no question that in many settings, teacher assistants are vital; however, with AI and robots on the horizon and armed with the suggestion that teacher assistants have not contributed to improved performance in classes (which is not really the point), we should ask whether teacher assistants have grown in number to offset the loss of time teachers are able to spend teaching in light of all the administrative and extra-curricular calls upon their time. 13% of the education budget is a considerable slice – can we use it more effectively?

c. When we look at funding we should also look at areas where our schools may be over-resourced and children over-stimulated. Too many classrooms are, arguably, too busy – the key issue is making sure what is presented in a classroom is not decoration, but an aid to learning.

Engagement is often hindered by technology although some schools use it very well (so dependent on the skills of staff – I assume it is a key aspect of current training at teachers’ colleges) There is evidence, for instance, that display boards do not enhance teaching and that children are over-stimulated and distracted. Learning is about engagement and the fewer things that distract, the better

d. Back to the future: Part of a new curriculum may be returning to what has worked in the past: an ordered, disciplined, straight-forward, all-class approach: In support

‘328 studies over 50 years show that direct instruction (structured guidance for teachers, teaching discrete skills before application, daily checks on learning, regular testing for mastery) has consistent, large positive effects on student achievement’

Dylan Wiliam quoting Jean Stockard, Timothy W. Wood, Cristy Coughlin et al

The Effectiveness of Direct Instruction Curricula: A Meta-Analysis of a Half Century of Research

And

“...in 2018, there is still a fundamental duty to teach students content: concepts, facts and principles. Taught by teachers trained as experts in that content, with all the status and resources and professional development that we would demand in any other expert occupation.”

“In all my meetings with people actually hiring graduates, no-one has ever said to me: “gosh, we don’t have enough people who know how to collaborate”.

No, what they say to me is: we don’t have enough specialists in software engineering. We can’t find graduates who are fluent in maths. We have meetings where three quarters of the people in the room can’t critique a set of numbers without pulling out a calculator and slowing us down.”

Alan Finkel Australia’s Chief Scientist

There’ll be plenty against but I would take some convincing

e. The jury is out on data with the charges being that it (a) embeds unavoidable bias (b) that it is used predictively and shapes teacher

expectations (c) that it ignores the key elements and characteristics of successful learners, ie work ethic, attitude, sense of purpose, communication skills which gives it disproportionate influence in profiling (d) the gathering of data is not safe and is excessively time-consuming. I could go on

Building a New Paradigm:

Preamble: The ideal education provision is one that is rigorous, non-selective and provides equal opportunities for all.

To achieve that, we need to change the culture of education and recognise that our current system of education, based on a model that reflects an out-dated economic model, is failing an increasing number of children. What lets children down is a lack of discipline, low expectations from teachers pupils and families, weak aspirations and the opportunity to learn and grow with others of mixed abilities and personalities in non-selective schools.

Action Points:

- a. Work to reduce selective education at all levels

Revisit all assessment, formative, summative, SATs, GCSE, A Levels, Progress Eight + etc with a view to both reducing overall assessment (not classroom teaching) and looking at ways in which AI can make assessment discrete.

- b. To remove league tables, reduce exams, but keep testing
- c. Abandon the idea of baseline assessment
- d. Include a strong ethical / values base to the curriculum from school entry onwards
- e. Encourage whole class teaching and a traditional teaching model (including regular testing in lessons) at defined stages of education – certainly years 3 – 6
- f. Review the way we teach literacy and numeracy (not the debate about phonics, Singapore / Shanghai mathematics, but at a more philosophical level. There are just tools; how to children learn best is what we should be debating.
- g. Ensure that the environment, conservation and sustainability lie at the heart of the new curriculum
- h. Underpinning the main structures of EYPS with the four attitudes

- i. Differentiate more about how education is delivered at the stages of education
- j. Divide formal lessons into core and non-core subjects at KS2 and possibly KS3 levels
- k. Promote the role of teachers politically and through better salaries and more teaching time
- l. Start formal lessons at 9.15am primary after physical education / music / art sessions
- m. More school-based CPD and less reliance on the education industry
- n. Make greater use of e-learning. Blended education should be available especially in senior schools where ALL A level subjects should be available to ALL students regardless of school
- o. Looking at the distinct role of tutor / teacher in place of the teacher assistant role
- p. Replace History and Geography in the middle years with world studies.
- q. Reviewing the place of oracy, philosophy and other subjects in KS3
- r. Change set curricula (ie economics and history)
- s. Work for an academic, non-university pathway
- t. Work with the Sutton Trust to oppose unpaid internships and apprenticeships
- u. Look at styles of teaching relevant at each level (not ‘teaching styles’)
- v. Review of funding with emphasis on auxiliary staff, resources, CPD and technology
- w. Work to get schools to embrace holistic teaching. Educating parents is of key importance. Review.
- x. Teaching and encourage self-discipline, self-control and the ownership of decisions. A ‘consequence’ rather than a ‘blame’ culture.
- y. Work ethic and discipline to underpin the new curriculum
- z. Review of subject choices and a move towards an academic vocational / non-university pathway

+ *English Baccalaureate (EBacc) subjects (sciences, computer science, geography, history and languages); and three further subjects, which can be from the range of EBacc subjects, or can be any other approved, high-value arts, academic, or vocational qualification.*

5. The transitional paradigm and the future paradigm - summaries

The Transitional:

The outcome must always be to provide the best education for the child, ie the education offered to children should be relevant to their needs

To achieve change, funding is necessary and schools and teachers need to be assertive and political in helping shape government policy. This may not always be in interest of teaching unions, teachers' colleges or the very widespread education industry, but is crucial

To evaluate how we resource our schools and what habits we can break

To change the philosophy and direction of education to embed ethics and values, the principles of sustainability, ownership and

With better use of AI and blended education, schools should work towards being non-selective and fully inclusive. Learning difficulties should be rebranded as alternative learning pathways.

There should be a more natural division between the social responsibilities of schools and the pastoral / teaching roles within

The school day should shift later and be divided into essential and selected learning modules – shorter time in class should be considered

In KS2 and KS3 the curriculum should move away from the current subject boundaries to allow for human and earth studies which incorporate history, geography, economics, philosophy, religion and ethics,

Schools should be learning centres for adults and children

Education needs to develop better non-university routed pathways for academic students

In KS4, specific subjects such as economics, geography and history should update their curriculum

All schools should be able to offer all A Level courses on-line

Future:

An education system embedded in a strong ethical foundations that adheres to the principles of sustainability.

An education system that promotes on-going education in schools without boundaries, in the wider community, in attitude rather than place

An education that is based on a good work ethic, sense of personal and social responsibility, discipline and focus, and that engages children

An emphasis on creative subjects, ie art, design technology, engineering, coding, music

Identifying what knowledge to teach in face of an exponential explosion in knowledge and the part that will be played by AI, in helping us to redefine what we can keep and what we can jettison

A tertiary / post-school system with strong vocational pathways including an academic, non-university pathway.

A focus on the skills that are required to communicate, share, interpret, knowledge within subject disciplines (the three leading questions in each subject area)

A system that addresses mental health issues by focusing on externals community

A system in which technology is an implicit part of the learning process

An agreement between schools and society / parents / community / government to address the wider issues pertaining to the education of children

A school system that is non-selective and fully inclusive

A curriculum that is available either as e-learning with tutor / teachers or in the classroom

An assessment system that is discreet and that both allows for changes over time and measures more than outcomes or the likelihood of outcomes.

Appendices:

(i) The number of pupils with special educational needs (SEN) is 1,244,255 (January 2017) 14.4%

- 242,185 pupils have a statement of SEN or an Education, Health and Care (EHC) plan – that's 2.8% of all pupils.
-
- A further 1,002,070 pupils are on SEN support. This is equal to 11.6% of the total pupil population and remains unchanged since January 2016.
- **SEN support*** = support that schools provide to support SEND pupils, usually covered in a school's SEND Information Report. More details here: <https://www.gov.uk/children-with-special-educational-needs/special-educational-needs-support> SEN support replaced 'School action' and 'School Action +', following the reforms of 2014.
- **An EHC plan** = the Education, Health and social Care support that is to be provided to a child or young person who has Special Educational Needs (SEN) or a disability. It is drawn up by the local authority after an

EHC needs assessment of the child or young person has determined that an EHC plan is necessary, and after consultation with relevant partner agencies i.e. a pupil with more severe needs.

** SEN support is an interesting figure as it's determined by schools. In my experience schools that are struggling and vulnerable do not have the capacity to deal with all pupils with SEN, so they focus on the most severe cases, often missing for example those struggling with literacy because of dyslexia who may be on the register in other, more stable schools. The point is, these figures may be an under estimate.*

With regard to types of school attended by those with SEN:

- **Nursery** = 5,990
- **State funded primary** = 633,105 out of a total of 4,689,660
- % of SEND pupil 13.5% (633,105)
- % of pupils with SEND and EHC plans who go = 1.3% (62,390)
- % of pupils with SEND without EHC who go to = 12.2% (570,715)
- **State funded secondary** = 399,005 out of total of 3,223,090
- % of SEND pupils who go to = 12.4% (399,005)
- % of pupils with SEND and EHC plan who go to = 1.7% (53,865)
- % of pupils with SEND without EHC plan who go to = 10.7% (345,140)
- **PRUs** = 12,085
 - % of SEN pupils at PRU's = 77.1% – what does that tell us about who is being excluded from schools?! **We have recommended to the Education Committee that all excluded pupils should have an assessment of their needs.**
- **Independent** = 81,275
 - % of SEN pupils = 13.9%
- **Maintained Special** = 109,050
- **Non-maintained special** = 3,740

