

CHILDHOOD 2025 AND BEYOND

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How might childhood change over the next 18 years as a result of the development of technology?

Introduction

This report comprises three sections:

Section 1: Timing, childhood and technology: a survey of forces

In this section I will describe contemporary UK childhood (0-18) as shaped in large part by the figure of the 'pupil-child'. Contemporary childhood is the result of the more or less successful coordination of numerous preparation/performance sequences on scales ranging from the single day to the life-course. A single dominant timing has emerged as a key feature of hegemonic versions of childhood which places children within a bio-political national order. Within this temporal order, children are 'human becomings', sites of investment in the economic future. Dominant timing has long been maintained by out-maneuvring a wide range of alternative timings. Some of these alternative timings are defined by children's expressed preferences – attempts to define 'homework time' as 'rest time', 'rest time' as 'entertainment time' or 'class time' as 'social time'. Others are defined by unwilling variations in states of consciousness and activation. Having contrasted dominant and alternative timings, I will then suggest that the increasing penetration of processing and communications technology into children's lives is lending new substance to alternative timings. Childhood is increasingly shaped by temporal multiplicity.

Section 2: Emergent issues

In this section, the contrast between dominant timing and temporal multiplicity is used to generate three sets of emergent issues concerning children as learners, as market and social participants and as a bio-political resource. In generating these issues both problems and opportunities presented by temporal multiplicity have been considered.

Section 3: Events and activities

This section describes a programme of focussed discussions, consultation and reporting designed primarily to convert unknown unknowns into know unknowns.

Section 1: Timing, childhood and technology: a survey of forces

Introduction

UK childhoods today, in all their variety, are shaped, in part, by a dominant version of childhood that identifies the child with the 'pupil'. This version is sustained through many adults' practical concern that any given experience, mundane or exceptional, should take place at the 'right time' for a given child. At the different time-scales of daily domestic life, a school career and the life-course, experience is segmented into a temporal succession of preparation time followed by performance time. This segmentation is achieved, in part, through a range of broadly technological means. The result is that from rest to schoolwork, from curriculum to assessment, from education to employment, the child must be on time and must experience one time at a time.

Dominant timing is achieved through numerous mundane tactical and strategic manoeuvres that exclude alternative timings from relevance by minimizing the resources available to them. Such alternative timings include children's attempts to convert 'class time' into 'social time' or 'homework time' into 'rest time'. They also include children's unwilling

variations in levels of concentration, activation and states of consciousness. No sleeping in class. Alternative timings vary between individual children and are inflected by age, gender, social class, ethnicity, ability/disability.

Dominant timings of different scales are organised and articulated around the notion that children are the future, are 'human becomings' (Lee 2001) always in preparation for an economically productive adult performance. This version of childhood is not without its conflicts and tensions, but parents, policy makers, practitioners and children are all affected by it. Many are committed to it. It offers benefits to government, promising to shape the future workforce and thus to intervene in economic and national competitive difficulties before they arise. It gives many parents grounds for optimism about their child's future. Even as it variously trains, persuades and coerces children into becoming and remaining tractable as they age, it works against neglect, cruelty and exploitation.

In what follows, I will illustrate the relationship of this dominant childhood with domestic, school and national life. I will then discuss available critiques of dominant childhood in order to identify key narratives that may shape our expectations of the future of childhood. In the course of this discussion I will identify key technological developments and the factors that are bringing new technologies into a close and complex relationship with dominant childhood. I will suggest that inexpensive processing power coupled with dense communicative networking and sensory and cognitive technological enhancements may lend substance to the alternative timings that dominant childhood has, for many years, successfully out-manoeuvred. A resultant state of 'temporal multiplicity' will pose challenges and opportunities for children, parents, educators and policy makers.

Bedtime, school-time, work-time

In the dominant version of childhood, a wide range of techniques and strategies are used in attempts to form links between time-scales so as to draw the child into a positive and productive personal future. Domestic 'bedtime' is a good example. Many children have a specific weekday bedtime. Children often seek exceptions to this standard timing by raising alternative timings that would make the standard appear to be mis-timed. Perhaps the child does not yet feel tired; her own body, after all, has a 'clock'. Perhaps something particularly interesting is scheduled on television and going to bed would mean missing it. Perhaps a friend's domestic schedule allows later bedtimes. If and when care-givers answer these arguments, a timing from beyond the domestic realm is a key rhetorical resource. If the child does not go to bed at the right time, s/he will not be ready for the start of the next school day. S/he will then be tired at the wrong time and less able to study effectively. This rhetoric is typically supported by a heterogeneous collection of technologies and entrained expectations which help to exclude those alternative timings and so increase the salience of 'bedtime'. These might include a clock, the four walls of a bedroom, a change of clothes, soft toys, low lighting levels, the ritual use of the bathroom and reading a story. Making the 'pupil-child' or the 'human becoming' means synchronising timings so as to connect different time-scales like those of daily domestic life and school career. This is a thoroughly technological achievement. The effectiveness of alternative timings is generally minimised as the dominant timing accrues, comparatively, much greater technological substance.

Turning to schooling, Foucault (1977) discussed the mundane technologies of an 18th century school of calligraphy, many of which are still in use today. Linear curricula with regular testing of individual pupils' progress coupled with opportunities for remedial work are used to establish a standard pace of learning. A classroom layout that gives teachers a clear line of sight, coupled with disciplinary sanctions, attempt to exclude alternative timings, such as the rhythm of conversation between peers and the non-linear associations of the day-dream, from the classroom. These technologies often aim at gaining and shaping pupils' attention and at manipulating their level of consciousness. For any adults who have forgotten their childhood experiences and find themselves in a school, the ringing of a bell to mark the end of a lesson can be quite a visceral and psychological shock.

Schooling techniques and strategies establish the rhythm of 'curriculum/assessment', which extends beyond the school through further and higher education. This rhythm connects with economically productive work principally through paper qualifications gained, in part, by examination. These paper qualifications are a crucial element of today's market in jobs and careers. They symbolise an end to a linear process of human becoming and are treated as a statement of the quality, reliability and likely economic value of the human being that has been produced.

Bio-political strategy and critique

The processes through which dominant childhood is produced clearly link issues of timing with issues of materiality, technology and, given the importance of children's levels of consciousness, physiology and neuroscience too. When this version of childhood is successful in its own terms, a single dominant time-regime is composed in which the child's mundane experience is coordinated with and rendered compatible with a vision of the future state of the UK's political economy. This vision is fundamentally concerned with the balance between future tax revenue and future public expenditure. The perceived legitimacy of that dominant timing currently lies in the meritocratic promise of national publicly-funded schooling. Not all persons, materials, technologies and physiologies need be entrained to the dominant timing for it to achieve hegemony. Its dominance depends on it giving substance to and forging compatibility between the vision of the policy maker, many parents' hopes for their children and many children's own aspirations.

The benefits of this version of childhood with its dominant timing and tight coordination should be clear. Shaping human becomings to colonise the economic future by segmenting lives into preparation/performance sequences has been so successful a competitive practice that it has remained a key bio-political (Rose 2006) strategy of minority-world states, including the UK, for many years. According to some critical positions, however, a major cost lies in it limiting the possibilities of childhood and of learning to what can be achieved within an age-based social hierarchy of power and authority. A number of cultural and ideological critiques of education have been developed. Each seeks to mark and occupy the space of alternatives to dominant timing and the figure of the pupil-child. Each has created its own narrative for change, complete with characters of known identity and motivation. As I will suggest shortly, a new discourse surrounding 'digital natives' is currently assembling anecdotes and research findings into its own comparable narrative.

For some (Illich 1973), dominant timing represented an undesirable invasion of capitalist interests into children's lives, training them for a future of compliance in industrial society. At first glance, this critique might seem to call for a stronger barrier between times of preparation and times of performance to preserve children against the adult world. The 'de-schooling' vision, however, sought instead to shatter that division and the age-hierarchies that it supports, so as to link children directly to the needs and skills of their local communities, to work and learn as peers. On this view, the pupil-child was an inappropriate vehicle for learning in any society that did not match up to, differed from, or wanted to build an alternative to, a capitalist industrial norm. Here children, and society as a whole, stand in need of revolutionary 'liberation' from schooling.

In the UK a further critical tradition holds that dominant timing fails to take sufficient cognisance of the existing temporal orientation of the lives it is attempting to shape. It can act as a dominant culture which tends to ignore or to misunderstand the timings of those other cultures in which children are already embedded. This can result in the intensification of social inequality through the mutual incomprehension of educators and children from less educated backgrounds across generations (Bernstein 1971), or in the formation of anti-school subcultures (Willis 1977), based on a time scheme that has little place for delayed gratification. This critical tradition identified a hidden curriculum of patience which requires that pupils are comfortable with linear progression on the time-scales both of their own life-course and of the symbol manipulation practices involved in performing explicit 'reason'. This is taken to exclude many children from opportunity. Here schooling is portrayed as a rather crude cultural-colonial enterprise that downgrades and/or polices alternative timings.

The implication is that those downgraded must be better understood. Rebels should be embraced as critical commentators.

More recently, sociologies of childhood (Mayall 2002; James et al 1998) have directly confronted the legitimacy of identifying the child with the pupil. Much sociology of childhood elaborates an ethico-political critique of dominant timing. Adults and children are seen as being categorised by society as 'human beings' and 'human becomings' respectively. These categorisations are taken to ensure that children remain subject to adult power and authority. Sociologies of childhood then emphasise the constructed nature of 'human becoming' and try to re-imagine children as individual 'human beings', social participants 'in their own right', equal in principle to adults. Questioning the preparation/performance distinction on the gross scale of the life-course, has the potential to open the re-negotiation of many other such distinctions on many smaller time-scales. Greater justice will be achieved, it seems, when the voice of the child is raised against the assumptions of the adult world.

Substance, narrative and change

The cultural and ideological critiques I have summarised speak in the name of alternative timings. But in the UK at least, they have had little success in challenging the dominant model of the pupil-child that concerns them so. Schooling has proved remarkably adaptable in responding to critique with small-scale adjustments while remaining unchanged on the large scale. Indeed, there are reasons to think that dominant childhood is expanding and diversifying its claims in the UK – more testing, more years in school, 14-19 diplomas etc. One way to account for this apparent conservatism in the UK educational system is its intimate connection with bio-political strategy. On this view, the pupil-child model, the becoming/being distinction and the dominant timing of preparation/performance segmentation together compose a mechanism of government that is too valuable to be altered significantly. What other arrangement could promise such purchase on the future? Further, as I suggested above, the perceived interests of many parents and children have been successfully aligned with Government so as to lend current arrangements hegemonic power. Even if this account is correct, however, it is not exhaustive. There is room for another, based on comparison of the relative substance that dominant and alternative timings can currently collect.

As I suggested above, dominant timing has become dominant through the coordination of activities at different time-scales, and this coordination is very often reliant on technology for its ease of performance and stability. The walls of the classroom, for example, reliably exclude a degree of noise and distraction, helping a teacher's efforts to define the use of time. In comparison, alternative timings, like a child's cycle of concentration levels or the rhythm of conversation, tend to lack substance. Objects and devices that could substantiate alternative timings, from toys to magazines, tend to be excluded from classrooms precisely in order to consolidate dominant timing and preserve children's state of becoming. If a child is bored in class, they will have to find discreet means to entertain themselves. Since paper and pen are both available and legitimate in the classroom, the 'doodle' is born. Other readily available resources that might substantiate an alternative vision of appropriate activities include other children, and attempts might be made to enlist them. However, beyond voices, bodies and a careful selection of approved items, these alternatives tend to lack resources. This has a number of consequences.

First, alternative timings rarely grow beyond the threshold at which they could begin to have lasting and constructive outcomes. They retain the negative, destructive character of 'bad behaviour' partly because they lack the resources to build their own coherence and coordination. This is not to suggest that malice cannot be found in schools. Some alternatives are reactionary attempts to spoil dominant timing. However, the limited growth and development of alternatives means that there is little basis, beyond a given child's reputation, on which to draw a distinction between reactionary and potentially constructive alternatives.

Second, since these timings have little substance, their capacity to interact with and become coordinated with other activity sequences is rather limited. This makes them a relatively poor basis for any long term planning. They remain so diverse that they are not considered a viable site of investment. Compared to dominant timing they therefore remain the trivial and inconsequential stuff of childhood. A version of the public/private division is performed in schools which may, historically, have sealed policy makers' imagination against alternatives.

The third consequence is that reflection on alternative timings tends to have a 'narrative' rather than a 'technical' form. Consequently, reflection on change in childhood comes freighted with ready-made identities, static motivations and clear expectations. The narrative/technical distinction needs a little explication.

Dominant timing is well-equipped with notices, timetables, professional training for teachers and so on. For dominant timing, the answer to the question 'what happens next?' can be found by reference to one of these technical descriptions. Alternatives however tend to lack technical description. When faced with the question 'what happens next?' regarding an alternative timing, the tendency is to construct a robustly self-consistent narrative as a predictive model. This means deciding upon relatively static identities, motivations and relationships and, figuratively speaking, setting them in motion. The three critiques described above are good examples of such narratives. Each depicts dominant timing as an almost monolithic oppression and identifies alternatives with a yearning to be free. This matters because narratives feed identities and identities can become forces. Thus, the more rapidly 'what happens next?' is answered with the narrative conclusion 'freedom', the more reactionary responses to the possibility of change are strengthened. Some will fear that allowing alternative timings to grow and become substantial will end in chaos or render schooling, even adults in general, useless. A firm stand against change will seem appropriate. Liberatory narratives also have consequences for those children who interpret their lives through them – self-righteous indifference or even hostility to schooling. These reactions would tend to limit the potential to make positive adaptations to policy and practice were childhood to begin changing with technological developments. A sense of the force of such identities can be gleaned from the following quotation;

'School didn't teach me to read – I learned from my games'
- a student'

Prensky (2005)

Government, enhancement and 'digital natives'

The technological and political conditions for alternative timings to grow and develop within dominant timing have, of course, been emerging for some years. Today, new internet-capable devices and modes of connection are proliferating. Sensory and cognitive enhancement and sophisticated communicative ability are to be found in game devices, mobile phones, cameras and laptops. Rival social, collaborative and trading networks compete fiercely for attention, custom and data. Policy makers are alert to the creative and economic potential of a population that is enhanced by emerging technologies. Portable processing and communications power is a taken for granted aspect of many children's lives. The conditions are in place for the opposition between dominant and alternative timings to be transformed into a condition of temporal multiplicity. This would not mean an end to conflicts of vision and desire. It would, however, reduce the significance of the simple adult/child division in giving structure to those conflicts.

Aside from anything else, new technologies allow children to experience more than one time at a time. The activity sequences involved in email communication, phone conversation and video viewing, for example, can all be woven around each other. The key tension for policy makers is between the need to have the pupil-child make use of new technologies, and the concern that multiple timings will disrupt the carefully constructed and, historically, highly effective dominant time regime.

The 'digital native' discourse (Prensky 2005) is an attempt to resolve this tension. It draws on all three of the critiques described above to compose a sophisticated generational colonialism, advising educators on how to interact with the 'other'. It offers many valuable insights into the specific habits and technologies that currently inform relations between pupils, teachers and curricula. Prensky gives pithy expression to existing concerns. As a guide to the future of childhood more generally, however, it is limited by its exclusive focus on the relationship between children and educational professionals. Given that a lot of 'digital immigrants' will be leaving work for retirement over the next decade or so, it also has a clear sell-by date.

Summary

In this section I have outlined the alignments of force that have stabilised childhood around a pupil-child norm for some decades. I have identified tensions between one dominant and many alternative timings, tensions that permeate the childhoods of today and of recent history. I have attributed the relative weakness and under-development of alternative timings to a relative lack of technological substantiation and suggested that existing and emerging processing and communications technologies may convert childhood into a temporal multiplicity.

Section 2: Emergent issues

In Section 1, I argued that the substantiation of alternative timings is the key trend that relates future childhood to technological development. But what problems and opportunities might a state of temporal multiplicity consist of? In this section I will elaborate on this with three sets of concrete questions.

A: Children as learners

1. The distinction between 'concrete' and 'abstract' reasoning has long been central to our vision of learning. For many years the distinction was linked to narratives of individual progress, and cognitive development was narrated as an increasing independence from the material and concrete. The ability to dissect a conclusion into the reasons that justify it, and to place the reasons in order before the conclusion, depend crucially on a sensitivity to temporal ordering and an appreciation of a rhetorical form of delayed gratification. Performances of authoritative, reliable and superior knowledge often take the form of the transcendence of immanent events/objects by thought. Contemporary socio-cognitive views (Flynn 2007; Hutchins 1996) however would tend to see logical abstract thought as just one skill-tradition amongst others, one that has become widespread in highly temporally-ordered bureaucratic/industrial societies. Technologies that offer new synchronies, sequences and articulations promise to bring temporal multiplicity to even the most formal organizational processes.

- What, if any, evidence is there that new technologies mean new types of reasoning?
- What are the likely consequences of emerging temporal multiplicities for the utility and cultural value of abstract reason?
- How will different thinking styles be socially or interpersonally distributed?
- Beyond concrete immanence and abstract transcendence what figures are at our disposal in understanding learning?

2. Biological processes have their own rates and timings. New synchronies and sequences may demand that they be ignored or managed in new ways. Reports from South Korea indicate that ignoring dehydration and urinating without leaving one's seat are current strategies for maintaining uninterrupted game play.

- What, if any, evidence is there to suggest that socio-technical and bio/neuro-physiological processes interact?

- What relations will form between new temporalities of learning and physiological and neurological processes?
- How will the sleep-wake cycle assert itself?
- What will come to count as 'good' management of the body's needs and demands?
- Will children and/or carers need new levels of training in body management?
- Will a market emerge for neurologically active substances to help manage temporal multiplicity?

3. Currently, curriculum delivery is organised around age cohorts. Children may find themselves sharing tasks and space with other who are almost a year older or younger than them.

- What, if any, evidence is there that age cohorts affect student performance?
- What are the advantages and disadvantages of age-based 'herding' ?
- Do age cohorts have a future?

4. Smail (2007) interprets many cultural activities as expressions of preference for certain states of consciousness. 'Learning' already involves many such states from high concentration, to imagination, to excitement.

- What is currently known about the relationship between children's learning and states of consciousness?
- Are all or some of these states 'contagious'? If so, by what mechanism? Is physical co-presence important?
- How rapidly do learners under different circumstances move between them?
- Is state of consciousness currently a matter of taste and preference amongst learners?
- Are preferences shaped by age, gender and social class?
- How might tastes develop in the light of temporal multiplicity?
- Are 'boredom' and 'frustration' currently functional aspects of learning? Can they continue to be?
- What habits and concrete activities will future educators prefer students to develop and engage in?

B: Children as sites of investment / bio-political resources

1. Once, personal recommendation/reference was the sole means for young people to distinguish themselves in potential employers' eyes. Over the years the portable and relatively reliable market information embodied in paper qualifications achieved through examination have preserved and/or increased labour market efficiency. This in turn has shaped curricula and the function and process of schooling.

- What, if any, evidence is there to suggest that current qualifications are failing to meet employer's needs?
- Will paper qualifications gained by examination continue to provide employers with the information they want?
- Will 'course-work' be seen as a credible reflection of individual ability?
- Will different sectors place different emphases on personal recommendation, paper qualification and other sources of information?
- Will closer relationships between employers and schools emerge, enabling children to develop a track record of paid work from within curricula?

2. Currently, the key demographic factor of the availability of young workers favours the Chinese and Indian economies. Coordination between existing and future industries is mediated through the preparation phase of the life-course. In the future we may see increased competition for the interests and ambitions of the young.

- What factors would enable/limit the virtual migration of pupils between educational systems?

- How might ethnicity and gender shape such pupil-sharing practices?
- How will education adapt with children's changing aspirations?
- In what global regions might the UK source future pupils?
- Might wealthy nations expect a return for investment in others' education systems?
- Will it continue to make economic sense for all states to run their own national education systems?
- Children's aspirations have been a key element of US 'soft power' for decades. Will this power decay, be transferred or diversified?

3. In periods of pupil-scarcity there may be pressure to make the most of available resources.

- What evidence is there that UK children will be in short supply in the future?
- Will this result in increasing standardisation and monitoring of pupil experience?
- Could new technologies be used to monitor pupil activity outside school hours, detecting and correcting deviance?
- If so, how will this interact with pupils' and carers' post-technological narratives and identities focussing on choice and diversity?
- Will a market emerge for neurologically active cognitive enhancers?
- What new hegemonic understanding of rights and responsibilities of children, carers and the state might emerge?

C. Children as social and market participants

1. Internet trading, virtual social spaces and social networking have a brief and impressive history so far. The infrastructure already exists for under 18's to purchase physical and virtual goods and services and to review those good and services for others. Open source coding and visual/auditory technologies both offer opportunities for under-18's to produce content and to provide services. Secondary markets in web advertising and public relations that link well-connected children directly with business are emerging.

The consequences of children's market participation as both consumers and producers on a large scale are unknown. Preparation/performance segmentation has applied to the vast majority of UK children since the 19th century, excepting entertainers and low paid part-time work.

- What evidence is there to suggest that children will be content and service providers in the future ?
- What content and services will under 18's provide?
- How might social class, gender, ethnicity and disablement inflect content and services?
- How will rates of pay be negotiated?
- What are the regulatory implications of an expansion of children's work?
- How will chronological ages of consumers and producers inflect competitive strategies?

2. The 'teenager' emerged in 1950's US as cars/music/clothing consumption created tension between domestic and alternative timings. Although this social-temporal form emerged in one generation along with specific technological and economic conditions, it composed a cultural 'wave' that has lasted several decades.

- Will the 'digital native' phenomenon have cultural consequences beyond a specific generation?

3. Habermas (1991) describes the emergence of the modern public sphere through print media acting as a channel for information about trading conditions and government taxation/regulation. For him, print media nurtured modern democracy, by giving market participants a space to share their concerns.

- To what extent will under-18 producer/consumers participate in discussion of trading conditions, broadly conceived?
- Will these discussions yield interest groups capable of taking effective, coordinated action?
- What range of balances will be struck between commercial and political concerns within these interest groups?
- What proportion of such interest groups will be defined by age and gender?

4. For decades, 'family time' has connoted the physical co-presence of carers and children. Position-tracking, sensory and communications technologies raise the possibility of 'distributed domesticity', synchronisation without co-presence. Time-pressured carers may find it helpful on a long commute, for example.

- To what extent can child-care be technologically distributed?
- Is there a market for tele-caring?
- How might age, gender, social class, ethnicity and ability/disability shape 'distributed domesticity'?
- Are there serendipities of physical co-presence that might be lost?

5. Distributed domesticity might look a little different from children's point of view, enabling greater choice over location while remaining coordinated with family. Carers could concentrate co-present caring episodes into selected weeknights and take advantage of children's peers as ways of occupying their own children.

- Will 'sleepovers' evolve into a friendship network based multi-householding norm for some children?
- How will children manage a changing roster of adult domestic authority figures?
- How will social class, gender, ethnicity and disablement inflect practicalities, identities and outcomes of distributed domesticity?
- Will 'peer socialisation' continue to be identified as a problem?
- How might public/commercial spaces further adapt to mobile groups of children?

Section 3: Events and activities

Brief:

To design a programme of events/activities to identify future issues/uncertainties in childhood and technology over the next 18-50 years. The programme must deliver robust evidence, must build-in credibility for a range of audiences, must stimulate inter-disciplinary engagement and must ensure relevance for education stakeholders.

Proposal:

The proposed programme comprises the following elements.

A: Workshops - 'UK Childhood: 2025 and beyond'

A series of workshops jointly hosted by Warwick Institute for Advanced Studies, DCSF and Futurelab. Warwick IAS was established in 2007 to host and foster interdisciplinary discussion and research. Given the short lead-in times to assemble groups of participants, the wide science and social science base of personal contacts the IAS offers will prove very valuable.

Each workshop to gather up to 15 invited academic, governmental and commercial stakeholders from UK and overseas. One workshop on each of these areas:

- children as learners
- children as sites of investment
- children as social and market participants.

A core of 5 participants will attend all three workshops to build institutional memory, to accumulate insight and to provide an internal means of testing the content of workshop interim reports (see below).

The purpose of each workshop is to convert 'unknown unknowns' into 'known unknowns'. On day one, workshop coordinators will introduce the area and enable the group to define 3-5 key topics using 'open space' (Owen 1997) techniques. On day two, participants will be asked to work in topic-defined interdisciplinary groups of 3-5 to produce a brief (1-2000 word) statement. Participants will be invited to envision futures, but roughly half of the brief statement will cover key resolved and unresolved disagreements.

Workshops will take place in July, August and September 2008.

B: Workshop reports

Interim reports identifying key outcomes of each workshop will be prepared shortly after each workshop. Interim reports will be available as source material for website (see below) and publicity at the discretion of programme funders. Interim reports will draw on the evidence base provided by participants.

Interim reports will be authored by selected core participants. Feedback on interim reports will be sought from other core participants. This feedback will inform future events in the programme and will inform the final report, to be completed January 2009 by a maximum of two named authors.

The final report will consolidate the evidence base, discuss areas of consensus and use identified areas of disagreement to develop a set of known unknowns. It will also anticipate Phase 3 of the Beyond Current Horizons programme by briefly sketching a range of future scenarios.

C: Children's panels

One children's panel of younger children (roughly 7-11) and one of older children (roughly 12-18) will be composed. Each will meet for one workshop day in October 2008. Using methods appropriate to the different age groups, each panel will be presented with scenarios drawn from interim workshop reports. They will then be asked to assess the scenarios against a range of criteria including credibility, desirability and sustainability and to compose their own scenarios. Even expert adults may be insensitive to important issues that younger participants may take for granted.

D: Website

A website will be designed to coordinate and publicise the programme. It will invite members of the public to develop and contribute their own visions of childhood's futures. A proportion of these will have a utopian/dystopian cast which will be useful in helping various audiences relate to the issues. Others may be more subtle and intrinsically interesting.

E. Participants

The three different workshops will call on three different constituencies.

i.) Children as learners:

Indicative sources of participants;

- BECTA
- QCA
- Futurelab
- DCSF
- Google
- Microsoft

Research expertise on;
Neurological enhancement
Social/cognition interface
Cognitive ethnography
Ergonomics
Virtual environments
Gender, ethnicity, class and dis/ability in educational outcomes

ii.) Children as sites of investment

Indicative sources of participants;
Department for Innovation, Universities and Skills
Confederation of British Industry
QCA
Department for International Development
Institute of Economic Affairs
Demos
Recruitment and Employment Federation
International Labour Organization

Research expertise on;
Demographics
Globalisation of job market
Regional education strategy
Gender, ethnicity and class in educational outcomes

iii.) Children as social and market participants

Offices of Children's Commissioners
Kids Industries UK Ltd
Demos
Civitas
Ebay
MySpace
Facebook

Research expertise on;
Children's participation
Virtual decision making and reputation
Psychology of virtual social participation

It is anticipated that two core participants will represent educational practice, one drawn from the Qualifications and Curriculum Authority and another from the British Educational Communications and Technology Agency. A further two core participants will be sought within the academic research community and one will have some other relevant interest/qualification. Someone with experience as a Children's Commissioner would be ideal.

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