TRUSTEESHIP, WISDOM, AND THE CREATIVE FUTURE OF EDUCATION?

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ABSTRACT

What role does, and should, creativity play in education? What role can and should creativity play in designing the school of the future? This article explores the ascendance of creativity in education in the late 20th *and early 21*[st] *century, exploring tensions in policy developments which both 'universalise' creativity and yet appear also to 'particularise' it within a specific set of social, economic and cultural arrangements and values. Arguing that the marketisation of creativity in particular is ultimately disastrous at personal, local, national and international levels, the case is advanced for an umbilical connection between creativity and education futures, in ways that highlight the role of wisdom, and creative trusteeship.*

INTRODUCTION: CONTEXT OF CREATIVITY IN REVIVAL

In many parts of the world, creativity in education, in all age-phases, has seen a revival of focus since the end of the 20th century. This revival, as Sternberg (2003) and also Albert & Runco (1999) note, stems from a mid 20th century perspective on creativity as associated with science as well as with art, and focuses on pragmatic approaches to fostering it. The late 20th century perspective on creativity saw it as life- and domain-wide, socially and culturally situated, and as 'democratic' (Craft 2008a).

The 20th century perspectives stood in contrast to the ancient Greek, Judaic, Christian and Islamic traditions, which had seen creativity as mystical, stemming from divine inspiration. Whilst this perspective had been challenged in the mid 19th century during the Romantic Era in Europe, in which creativity was increasingly recognised as a *human* capacity for originality, insight, and subjectivity of feeling and during which period psychological exploration began in earnest, foreshadowing the dominance of psychological exploration in the 19th century, reference to spirituality is still present in some accounts of creativity (for example, Fox 1983, Miller & CookGreuter 1999).

Sternberg & Lubart note (1999) and Sternberg also argues (2003) that psychological studies can be seen as having dominated the way in which creativity has been studied since the early 20th century, with a range of deductive, philosophical approaches in evidence. These authors note that studies can be grouped into eight schools of thought, the first three of which involve primarily deductive approaches;

> *Psychodynamic*: influenced by Freud's work (1908,1959) which viewed creativity as the public manifestation of unconscious drives, more recent work explores the significance of both primary and secondary processes, and thus the interaction of unconscious drives with ego-controlled reality-orientated thinking. The a priori nature of psychodynamic approaches, however, has been critiqued as selectively interpretive (Weisberg 1993).

> *Cognitive*: a much more influential school of thought, cognitive psychologists attempt to construct models which explain the processes and mental representations of creativity. Topics include, for example, the associative process (Mednick 1962), the genoplore process – from generative to exploratory thought (Finke, Smith & Ward 1992) and the creativity cycle (Wallas 1926).

> *Humanistic:* drawing on the work of Maslow (1968) and Rogers (1954) this school of thought emphasises self-development and self-realisation.

Contrasting with these, the authors signal three further schools of thought (mainly from mid 20th century) which involve an inductive, empirical tradition:

> *Pragmatic*: not so much a school of thought as a popularised movement to develop practical tools, a significant proponent is de Bono (eg 1992), others include Osborn (1953) and more recently Buzan's work on mind maps (eg Buzan 2002).

> *Psychometric*: a school of thought placing high value on the measurement of creativity, triggered by Guilford (1950) and leading to work by Torrance (1974) in particular which tested creativity and which is

still used particularly in the United States and far East. This school of thought also explores the relationships between creativity and IQ, some of it critiquing early work in the area by Cox (1926). Critical analyses have been developed, for example, by Simonton (1994) and Sternberg (1996).

Social-personality: parallel with the cognitive school of thought socio-personality approaches seek to identify motivational, personality and environmental variables in creativity (Barron & Harrington 1981).

Sternberg (2003) identifies two further approaches which combine both deductive and inductive traditions:

Evolutionary perspective: this explores the evolution of ideas using a Darwinian-derived notion of the 'survival of the fittest'. (initially proposed by Campbell, 1960 and developed by Perkins 1995, Simonton 1998).

Confluence perspectives: a range of approaches that acknowledge multiple components in creativity, for example work by Amabile (1983), Csikszentmihalyi (1988), Gardner (1993) and many others.

Whilst artists, often perceived as having highly developed creativity compared with others in society, have often formed the focus of investigation, this is decreasingly the case with an increasing recognition of creativity as inherent in other domains and aspects of life (Craft 2005). A great deal of the influential work of the 20th century in researching creativity within the eight schools of thought discussed by Sternberg (2003), and Sternberg & Lubart (1999) was undertaken by North American researchers. Perhaps due to the increasing amount of work being undertaken outside of the United States, the study of creativity, has noticeably shifted in the ten years or so to emphasise characterising rather than measuring, recognising complexity rather than looking for simplicity, focusing increasingly on the collective rather than the individual, and increasingly recognising the situatedness of activity rather than seeing creativity as 'universalized' (Jeffrey & Craft 2001; Craft 2008a). The early 21st century could perhaps be understood as a period of complex confluence, in that evidence of all eight of the 20th century traditions can be detected, and possibly earlier traditions too. It is notable that researchers beyond the USA are contributing to a considerable re-shaping of this map.

Although the study of creativity in psychology at global level and especially in the USA, remains perhaps of minor interest (Sternberg 2006), by contrast in England, as far as creativity in education at all phases (from the youngest children through higher education and lifelong learning) is concerned, there is increasing interest at the levels of policy, practice and research. The author has offered the observation that in general, creativity in English education can be seen as having occurred in three waves of increasingly intense attention (Craft 2003), the first being in the 1960s with the publication of the Plowden Report (CACE 1967) which brought together an influential and deep-rooted collection of child-centred approaches to learning, and which influenced educational provision profoundly in terms of curriculum, learning, pedagogy including architecture, classroom organisation and management, nature and use of resources. The first wave, whilst not focused specifically on creativity, nevertheless encouraged educators to nurture the creativity and curiosity of learners and to organise learning with these principles as driving features. Although influential, nevertheless, some analysts (Gammage 1987; Craft 2000) attribute the introduction of a content-heavy national curriculum in England at the end of the 1980s, to the failure of the Plowden approach to nurture high aspiration and achievement – indeed to really introduce systemic or particularly differentiated change in pedagogy (Bennett et al 1984; Galton et al 1980). Intriguingly, in the case of Galton's work, this problematic state of affairs was actually found to persist in a post-National Curriculum study by Galton twenty years later (Galton et al 1999).

By the mid 1990s however, the second wave of creativity in education began to become visible; this time bringing the arts, culture and creativity into close relationship, and linking these increasingly to the economy. The publication of the NACCCE Report in 1999 became a landmark for an approach to education, which infused a creative approach to teaching with a focus on pupil creativity in the context of a standards-orientated content-specific curriculum even for the youngest children. By contrast with the first and second waves, the third wave, in its volume, speed, density and potential for massive impact, might be likened to a tsunami, i.e. a huge and overwhelming wall of change caused by seismic shifts in the underpinning foundations in relation to what we aim for in education (Craft 2008b, 2008c, 2008d) rather than a mere wave, and is characterised by its attention to complexity and to particularistic detail through increasingly qualitative empirical investigation (Martin, 2008) although in some parts of the world including the far East, positivist studies are still in vogue.

Analysis of how creativity is being applied in education, produced during this third wave, recognises the tensions, dilemmas, accommodations and syntheses which are present. For example, analysis by Banaji and Burn (2006) recognised nine overlapping but distinctive creativity discourses in the English context, each focusing on a unique set of goals with a unique impact on provision in education. Some are more widespread than others and each has its own age-emphasis, as well as its own relationship with the historical approaches to creativity discussed by Sternberg & Lubart (1999) and Sternberg (2003) discussed above. The discourses – or rhetorics - identified by Banaji and Burn are as follows.

Creative genius – rooted in the European Enlightenment, this post-Romantic perspective emphasises extraordinary creativity in a range of domains

Democratic and political– emergent from the Romantic era this perspective sees creativity as offering empowerment

The notion of creativity as ubiquitous - which sees creativity as pervasive
Creativity as a social good – emphasising inclusion, multiculturalism

Creativity as an economic imperative – which invokes neo-liberal discourse around the economic programme

Approaches emphasising play – rooted in Romantic thought, childhood play is seen as the origin of adult creative thought

Approaches focusing on creativity and cognition – stemming from 20th century Piagetian and Vygotskian work, cognitive processing is emphasised

Creativity and new technologies – this discourse emphasises the creative affordances of rapidly evolving digital technologies in particular

The creative classroom – this discourse draws connections between spirituality, knowledge, skills and pedagogy.

The very multiplicity of these discourses, their foci and their history is worth noting and as argued elsewhere (Craft 2008, in preparation) perhaps indicates the extent to which creativity in education has become a vehicle for the development of education in fundamental ways – a point which will be returned to in this article.

The increased emphasis of creativity in the education of children and young people is widespread, including ongoing work in Australia, Belgium, Brazil, Canada, Denmark, England, Finland, France, Hong Kong, Iceland, Japan, Macau, The Netherlands, Northern Ireland, New Zealand, Qatar, Scotland, Serbia, Singapore, Turkey, Sweden, Switzerland, Taiwan, Wales, USA (Craft 2008a). Policies are in evidence from the early years (DCSF 2008) to higher education (McWilliam et al 2008) and whilst there may be multiple discourses generated by them, the nature of these policies has been described as 'universalized' (Jeffrey & Craft 2001), in that each culture, whilst distinctive (Leadbeater and Wilsdon 2007) is ruled by the 'bottom line' of economic advantage-seeking (Craft 2008 in preparation).

The emphasis on creativity stands in contrast to a highly performative approach to education (Ball 2003; Troman et al 2007; Troman 2008). The tensions and dilemmas involved in these contrasting perspectives for educators and learners across the phases of education, are well-documented both in England (Chappell, in press; Jeffrey & Woods 2003; Troman et al 2007a, 2007b) and elsewhere (Boyd, 2005; Burnard & White 2008; McWilliam & Haukka 2008). Nevertheless, at least in English contexts (from the early years to post-compulsory education), there is evidence that despite fundamental tensions in perspective between the creative and the performative, many teachers do find it possible to focus on the fostering of creativity, maintaining both the performative and the creative tracks and even blending these (Jeffrey & Woods 2003; Jeffery 2005; Craft 2008).

A notable aspect of the creativity revival in education is the range and extent of classroom practices associated with it, and the wider values with which it is associated. It is not necessarily a coherent picture, although it is an energetic one. In England, there are palpable tensions in relation to at least two continua; one focused on the extent to which creativity is understood to be specific to particular disciplinary areas, and the other focused on the extent to which creativity is understood to involve the individual rather than collaborative or collective effort (Craft 2008e). It has been noted (ibid) that the assessment of creativity naturally reflects these tensions and continua (as shown in Fig 1).

indi	vidual
Individual students' learning processes (e.g drafting, redrating, rehearsing, refining) in specific subjects. **Depth of applied individual student subject knowledge** in teacher-assigned or student-identified problems. **Individual students' artefacts / outcomes** (e.g a musical composition, a piece of writing, a presentation made using ICT, an artefact made in design and technology). **Domain-**	**Individual students' cross-curricular learning processes** (e.g drafting, redrafting, rehearsing, refining). **Depth of applied individual student knowledge** in general problems either assigned or identified. **Individual cross-curricular outcomes/artefacts** (e.g proposals for a debate, or an artwork representing this) **Creativity**
Specific **Collective student learning processes in specific subjects** (e.g choreographing, collaborating on a design task or on a musical composition). **Collective students' artefacts/outcomes** (eg a choreography, a group presentation, a collectively written play script). **Individual student nurturing networks of support to enable individual creativity** (subject-specific). **coll**	**as General** **Collective student learning processes in cross-curricular projects**, or seen in transfer from one subject to another (e.g from music to choreography). **Collective student artefacts/outcomes in cross-curricular projects**, or seen in transfer from one subject to another **Individual student nurturing networks of support that enable collective creativity** across subjects/in general. **ective**

Fig. 1: Dimensions of creativity in practice
(Craft 2008e)

As noted by the author each spectrum raises its own challenges.

The ***individual/collective*** spectrum, recognising that some (Gruber, 1988) dispute the existence of entirely individual creativity, raises questions in terms of how assessment of collective work can count toward individual pupil progress. Evidence increasingly suggests that in education, students are supported by one another's thinking in their creative engagement (Chappell et al in press, Mardell et al 2008, Craft et al 2008).

The ***subject-specific/domain-free*** spectrum can be seen in English policy at the current time, where 'creative and cultural' are often tied together (DCMS 2006; DfES 2007) whichever phase of education is under discussion, suggesting that creativity is associated with the arts and culture, a view to an extent following the stance of the NACCCE report discussed earlier (NACCCE 1999). In parallel with this position, curriculum development in relation to the lower secondary school curriculum (QCA 2008a, 2008b) proposes creative and critical thinking as generalisable personal, learning and thinking skills and thus suggests a 'domain-free' view of creativity.

Whilst some argue that at its heart, creativity in one domain is the same as in another, in that it ultimately involves asking 'what if?' in appropriate ways for the domain (Craft 2001; Burnard et al. 2006; Chappell et al. in press; Cremin et al. 200; Craft 2008, in preparation), others argue (Gardner 1993; Csizsentmihalyi 1999; Amabile 1990) that creativity cannot be understood without reference to the disciplinary area in which it occurs.

The tension made visible on this continuum, between the disciplinary-root and the generalisable view, may be an incommensurable one and raises the question of whether in assessing creativity in education, it may be necessary to ensure that both process and product are assessed (Cochrane & Cockett 2007). This combined with the tension between psychometric and componential approaches to assessing creativity mean that the role of creativity in being seen through assessment to be leveraging value in a rapidly accelerating global environment, is unclear.

Yet, the stakes are very high. For perhaps the most significant aspect of the revival of interest in creativity in education, is the connection seen by practitioners, policy makers, researchers and commentators between creativity and educational futures (Facer 2007; Sandford & Facer 2008; Craft, in preparation), in needing both to engage creatively in futures-orientation and to nurture creativity within educational provision. In this way, 'possible educational futures' (Sandford & Facer 2008) are in focus, in the context of possible, probable and preferred future scenarios as a whole (Bell 2003).

CREATIVITY INFORMING EDUCATIONAL FUTURES

Those who recognise the potential of blending both the performative and the creative discourses, can be seen as engaged in the construction of an educational future which attends to both the requirement for excellence and the open possibilities that emerge from a creative outlook, disposed positively toward innovation and change (Craft in press). The role of creativity in making possible appropriate, inspirational, inclusive and responsible education futures, itself an increasing priority for policymakers and practitioners the world over, can thus be seen as fundamental. Indeed in the book, *Five Minds for the Future*, Gardner (2006) argues that the 'creating mind' is one of the five Minds necessary to cope and to work generatively in a world characterised by rapid and accelerating change some of which threatens global stability and sustainability. For Gardner the creating mind seeks to problem-find, and to explore and investigate new questions. The other Minds he sees as important are the disciplinary mind (demonstrating mastery of major disciplines and crafts), the synthesising mind (demonstrating a capacity to integrate and communicate ideas from diverse sources), the respectful mind (capable of recognising and respecting differences between people and between groups of people), and the ethical mind (able to fulfil responsibilities as both a worker and a citizen). The presence of these other 'minds' in the holistic concept of mind Gardner envisions, indicate the multi-faceted challenges facing human beings as they prepare for a partially unknown future, and signal the integration of 'mind' which education needs to nurture.

In considering the role of *creativity* specifically in the exploration of educational futures, and the trajectory it may take, it is necessary to acknowledge at least three significant shifts in, and cementings of, values, underpinning the expanding creativity discourse in education.

The first of these is the emergence of a 'democratic' stance toward creativity at the end of the 20th century, which saw creativity as an everyday human capability (NACCCE 1999) rather than as the preserve of the extraordinary

(Wallace & Gruber 1989; Gardner 1993). This everyday human capability perspective on creativity is also situated by some (Haste 2008) as necessary in a world of rapid change, a point also made by Craft (2005, 2008) and Claxton (2006, 2008) who each emphasise social, technological, economic and environmental aspects of change. The focus on the democratic and the everyday could be seen as important principles for a creative educational future.

The second, is the increasing tendency of commentators and policy makers to interpret and cast the capitalist post-industrial economy as underpinned by creative thinking and behaviour in which risk-taking and practical application are valued highly (Ball 1998; Buckingham & Jones 2001; Robinson 2001) and where innovation is necessary as the tipping-point phenomenon discussed by Gladwell (2000) magnifies the marketplace of products and ideas. This 'marketising' of creativity is an international phenomenon and this harnessing of education to the market could again be understood as a principle for a creative educational future.

Finally, at least in England, a powerful argument has been in development since the late 1990s, for linking creativity and cultural development and indeed these have been adopted as linked priorities at policy level, following the government-commissioned report of the National Advisory Committee on Creative and Cultural Education (NACCCE 1999). This proposed an umbilical relationship between creative and cultural education, where each can be seen as being nurtured by the other. From the report's recommendations and reflecting also the conclusions of a second paper, *Culture and creativity: The next ten years* (DCMS 2001), emerged a large-scale programme of curriculum development, Creative Partnerships. This programme, established in areas of rural and urban deprivation, invested in education projects involving community artists of all types to both generate creative learners and cultural cohesion. Extended in 2008 to a five-hour a week 'Cultural Offer' (DCSF 2008) seeking to encourage young people's participation as producers of, participants in and spectators of culture, the programme sought to enable young people, through partnership with those beyond the classroom, to 'find their talent' (Creative Partnerships 2008). As acknowledged in Craft & Jeffrey (2008), the conflation of creativity with culture in education is evident in many recent policy statements in England; McMaster (2008) suggested Creative Partnerships could be understood as focusing on 'cultural learning'; the work of the Parliamentary Select Committee (2007) and the House of Commons Children Schools and Families Committee 2008) are further examples. The first was set up to investigate the ongoing implementation of the Roberts report (DCMS 2006a) which endorsed the melding of creativity and culture, the second sought to take forward its recommendations. As with democratic creativity and marketised creativity, creativity umbilically linked with culture could also be understood as a principle for the translation into a creative educational future.

Fielding (2007) argues that the challenge for educational change (and thus for educational futures), is to transform the 'functional' to 'personal' in shifting the values beyond a situation where students are recognised predominantly through how their attainment contributes to the performance of the school, to a position where the functional is harnessed to the personal and the emphasis is on the development of wide-ranging formal and informal development of wise persons.

Fielding's choice of terminology (2007) in referring to a need for wisdom, seems significant, for when applied to creativity, it raises questions about how far the tripartite rationale of democratisation, marketisation and creativity linked with culture are sufficient as a combined rationale for developing creativity in education.

THE ROLE OF WISE CREATIVITY?

Whilst drivers of policy commitments to nurturing creativity in education clearly involve economic, social, technological and ecological rationales, the economic rationale appears to be the most powerful, the argument being that successful 21st century economies are increasingly creative ones, transforming knowledge into social and economic assets (Florida 2002, 2005a, 2005b). This being so, creativity is an increasingly important focus for learning in schools and beyond (McWilliam, 2007), requiring new ways of thinking and learning (Pink 2005). The role of (digital) technologies in particular in such new ways of thinking and learning is undisputed (Conole and Dyke 2004; Fisher et al. 2006, Twining et al. 2006) and arguments focusing on the potential of information and communications technologies in education highly seductive (Heppell et al 2004). This is especially so when set alongside the argument that young people are increasingly 'digital natives' (Prensky 2001) and that multi-modal, playful, exploratory, collective environments involved in social networking, content generation and gaming are part of their everyday landscape outside of school (Kirriemuir & McFarlane 2004).

Arguments for new ways of thinking and learning that respond to the globalised marketplace, assume indefinite economic growth and development are both possible and desirable at global level, and yet this is seriously questionable at a literal level as well as the level of espoused values. At a literal level, evidence indicates that the human population has already exceeded the capacity of the earth's resources to sustain it (WMO/UNEP 2007). Linking the mismatch between resources and population masks the innovation culture of the developed world yoked to a capitalist economic growth model, which encourages development of artificial 'needs' in the culture of new is better and 'make do and mend' is not sufficient. Where the market is seen as a deity to which all else is harnessed, other 'goods' – such as the environment itself, or human resourcefulness, compassion or kindness (which are not seen as valuable) – in market terms, become undermined; potentially disastrous at local, national and global levels.

When it comes to creativity in education, tensions and dilemmas arise from the marketised rationale underpinning it (Craft 2003, 2005). Such tensions and dilemmas discussed in Craft (2005) include culture-blindness inherent in reifying the Western individualist approach to capitalism, which stands in marked contrast to the longer-standing collectivistic culture more typically found in the East (Ng 2003; Nisbett 2003). Marketised creativity is ecologically destructive and thus ethically questionable (Craft 2005, Craft et al 2008).

Nurturing creativity with wisdom is an increasingly urgent task, entailing attention to all those affected by creative actions and ideas and not simply a uni-dimensional evaluation. Wise creativity thus begs questions about collective responsibility and thus about the nature of 'trusteeship' in the 21st century, especially for professionals, teachers included (Gardner 2008). The meaning of trusteeship or stewardship of appropriate, responsible yet creative activity, is rapidly evolving in tune with accelerating change globally, and evidence emerging, at least in the USA, from the GoodWork project based at Harvard, Stanford and Chicago Universities, suggests that the notion of the societal trustee is declining (ibid).

The problems of the Western capitalist individualism over-reach, then, are significant. A globalised economic model as primary driver to creativity in education, leads to a culture-blind and therefore culturally insensitive model of 'development' and 'progress'. Informed by a 'neophiliac' approach, which suggest that new is good *per se* (Booker, 1992), development without attention to impact seems likely to lead to collapse at multiple levels from the personal to the global. From the perspective of both culture and environment, then, it is argued that any

creativity will not do; rather it is *wise* creativity that is needed in education. In other words, we need to ensure that our creativity involves our taking appropriate actions, which recognise multiple forms of understanding and knowledge, and take account of multiple needs and perspectives (drawing on the Berlin School –Baltes & Staudinger 2000; and the GoodWork Project at Harvard University – Fischman et al 2004). For a fuller discussion of why these approaches to wisdom are useful, see Craft (2005).

Against a background of decreasing societal trusteeship, education, as an adaptive ecological mechanism (Dillon 2008), seeks to play a key role in inspiring and influencing the future in relation to the social and the ecological and not purely the economic and technological. This is a challenge, for as Sternberg notes, whilst wise thought involves creativity, creativity does not necessarily involve wisdom (Sternberg 2003). And indeed, digital technology may bring with it some of the answers.

Nevertheless, it is still, in the 'noughties', the case that technology is only as transformative as the people operating it (Twining et al 2006). Thus, it is perhaps worth paying greater attention to the human dimension of educational approaches that connect the sub-personal, and wider culture and ecology with regard to creativity, where creativity and wisdom may be understood as two sides of the same coin (Knoop 2008). Recognising that the Cartesian dualism which tends to drive approaches to educational provision may need to be re-visited, Claxton, Craft and Gardner (2008), drawing on contributions from Knoop (ibid), Trotman (2008) and Rowson (2008) in particular, challenge the reification of conscious deliberations, in favour of an approach to cognition that represents a holistic systems-orientated position encompassing a spectrum of subpersonal (micro-level, neuronal and cellular) and the suprapersonal (macro-level, social and cultural), summarised in Fig. 2.

Degrees of wise creativity

Broad ---- mega   --- societal

                  ---- midi   --- interactions

Narrow   ---- mini   --- intra
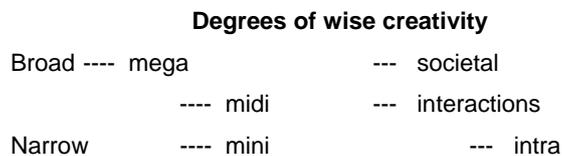
Fig 2: degrees of wise creativity (Claxton et al 2008)

A challenge for education and educational researchers will be to explore the relationships between creative thought at this mix of levels. Inter-disciplinary studies may be necessary, combining biology, sociology and psychology, incorporating the biological neuro-scientific exploration of mind, brain and behaviour in relation to possibility thinking, with the phenomenological, interpretive studies which draw on both sociological and psychological traditions.

According to Claxton, wise creativity demands a tolerance for complexity and uncertainty, assumption-questioning, perspective-taking, independence and courage, with a commitment to doing 'what seems to be right' even where it may challenge received opinion. For Claxton (2008) there are two conditions to this multi-level wise creativity. The first is a focus on complexity. The second is a (temporary) allocentric (i.e. not ego-centric) value-fair perspective on action – i.e. a concern to take responsibility for creative actions.

What Claxton's work highlights for researchers exploring creativity in education, is that it is not only complex, a point which is already manifest by the studies undertake so far, but that it is also socially and spiritually situated. Whilst many researchers acknowledge social context (Miell et al 2005; Rojas-Drummond et al, in press; Wix & John-Steiner, in press), the reach of the social and the depth of the spiritual offer together a slightly different

perspective. For Claxton et al (2008) wise creativity involves honest, detailed perception, patience, a disposition to seek below the surface, intuition and sensitive and systemic sensibility. These qualities suggest an 'orchestral perception' enabling navigation of the unknown in the transition from 'what is', to 'what might be'.

WISE, CREATIVE FUTURES FOR EDUCATION BEYOND THE HORIZON?

At the end of the 20th century, and resting on a bedrock of educational theorists who have posed questions around the nature of the future of education, Postman (1996) laid down a challenge in foreseeing what he described as the 'End of Education' (the title of his book) the need for clear narratives, or values, to inform education in the future. For Postman, these were moral guidance, a sense of continuity and understanding of past, present and future. These five narratives remain current in 2008, and the two elements that seem perhaps particularly live for creativity in education are the relating of the future to the past and present, and the moral or ethical framework.

These elements – creativity rooted in historical context, and in an ethical frame, are significant at a systemic level, as educators strain to be aware of what is over the horizon for learners, teachers and learning systems, and to foster creativity in appropriate ways as part of this. The effort is thus two-fold: in fostering creative education systems and also in fostering creativity. In these early years of the 21st century, childhood and youth in Western culture in particular increasingly reflect four major characteristics (Craft 2008a). These can be summed up as *plurality* of identity, context, media and temporality, increasingly wide ranging *possibilities* for engagement, generating ideas and seeing these through, *playfulness* and exploratory behaviour in respect of ideas, materials and relationships, and *participation* through ICT in particular (social networking, content generation, gaming). Yet, collectively, whilst recognising that the lived experience of children and young people is changing rapidly and that the world today's school children will become adults in does not, to a large degree, yet exist, we nevertheless have continued even in to the early years of the century, to design schools and education systems for the past (Heppell et al 2004).

Policymakers at multiple levels are faced with contrasting views of childhood and youth. One characterises young people as empowered and effectively moving beyond adult control (Newburn1996), whilst the other portrays the child or young person at risk (Frechette 2006) where adults' roles are to protect. Reaching beyond current horizons in developing dynamic, inspirational and appropriate educational provision, demands engagement with both positions, and in this context wise creativity seems particularly useful, and in particular collective creative trusteeship, where communities build and express their wisdom toward collective ends with a powerful emphasis on stewardship. At a point in educational history where pupil voice and co-participation is increasingly highly valued (Flutter, 2006, 2007), creative educational futures demand consideration of fundamental change to how we conceive of curriculum, pedagogy and learning, together with who teaches and learns, where, how and why. The increasing emphasis in England on working in partnership (Galton et al. 2008) across professional contexts in schools and elsewhere, provides a practical foundation for extending co-participative exploration by teachers, students, researchers, policy makers, in collective creative endeavour. Equally the involvement of young people directly in this challenging but overdue effort, trying out learner-led transformation, is under way (Craft, Twining & Chappell 2008; Craft et al 2008), seeking to develop community trusteeship. The success of endeavours to develop creative educational futures with wisdom, remains to be seen, but provides a live and urgent challenge to

those who dare to operate with what the Artistic Director of the Royal Shakespeare Company, Michael Boyd (2007), calls 'flappy valves'[i], willing to engage with what could be rather than purely what is.

END NOTES

i. I am grateful to the reviewer who noted that in a medical context, flappy valves may in fact be bad for the health; in the context of creativity, flappy valves offer a sometimes unexpected two-way flow of ideas, and are posited as bringing potential benefit, in part because of the element of surprise.

REFERENCES

Albert, R.S. & Runco, M.A. 1999. A History of Research on Creativity. In Sternberg, R. 1999. *Handbook of creativity*. Cambridge: Cambridge University Press.

Amabile, T. 1983. *The social psychology of creativity*. New York: Springer

Amabile, T. 1990 Within you, yithout You: The social psychology of creativity and beyond. (In Runco, M. & Albert, R. Eds), *Theories of creativity,* London: Sage Books

Ball, S. 1998 Big policies/small world: an introduction to international perspectives in education policy, *Comparative Education*, 34(2), 119–130.

Ball, S. J. 2003 The teacher's soul and the terrors of performativity, *Journal of Education Policy*, 18(2), 215–228.

Baltes, P.B. & Staudinger, U.M. 2000, Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *American Psychologist*, 55, 122-136

Banaji, S. and Burn, A. 2006. *The rhetorics of creativity: A review of the literature*. London: Arts Council England.

Barron, F.& Harrington, D.M. 1981. Creativity, intelligence and personality. *Annual Review of Psychology*, 32, 439-476.

Bell, Wendell 2003. *Foundations of futures studies I: History, purposes, knowledge*. New Brunswick, NJ: Transaction Publishers.

Bennett, S. N., Desforges, C.W., Cockburn, A. and Wilkinson, B, 1984. *The auality of pupil learning experiences*. London: Erlbaum.

Booker, C. 1992. *The neophiliacs.* London: Pimlico.

Boyd, B. 2005 Caught in the headlights: Seeking permission to be creative within the Scottish system of comprehensive education, paper presented at ESRC seminar, *Documenting Creative Learning*, Strathclyde University, October 2005. Available online at: http://opencreativity.open.ac.uk/recent.htm#previous_papers (accessed 10 July 2008.

Boyd, M. 2007. Talk given at *Royal Shakespeare company and creative partnerships seminar*, Stratford-upon-Avon, February 2007.

Burnard, P. & White, J. 2008 Creativity and performativity: Counterpoints in British and Australian education. *British Educational Research Journal*, Special Issue on Creativity and Performativity in Teaching and Learning. 34(5), 667-682

Buzan, T. 2002. *How to mind map*. London: Thorsons

Campbell, D.T. 1960. Blind variation and selective retention in creative thought and other knowledge processes. *Psychological Review*, 67, 380-400

Chappell, K. 2008 Mediating creativity and performativity policy tensions in dance education based action research partnerships: insights from a mentor's self-study, Thinking Skills and Creativity, 3(2), 94-103

Chappell, K., Craft, A., Burnard, P., Cremin, T 2008, Question-posing and Question-responding: the heart of 'Possibility Thinking' in the early years. *Early Years.* 28(3), 267-286

Claxton, G. 2006. Creative glide space. In Bannerman, C., Sofaer, J., Watt, J. (Eds). *Navigating the unknown*. London: Middlesex University Press.

Claxton, G. 2008. Wisdom: Advanced Creativity? In Craft, A., Gardner, H. & Claxton, G. (Eds) *Creativity, wisdom, and trusteeship: exploring the role of education.* Thousand Oaks: Corwin Press.

Claxton, G., Craft, A. & Gardner, H. 2008. Good thinking: Education for wise creativity. In Craft, A., Gardner, H. & Claxton, G. (Eds) *Creativity, wisdom, and trusteeship: exploring the role of education.* Thousand Oaks: Corwin Press.

Cochrane, P., Cockett, M. 2007. *Building a creative school: a dynamic approach to school development.* Stoke-on-Trent: Trentham Press

Conole, G., & Dyke, M. 2004. What are the affordances of information and communication technologies? *ALT-J, Research in Learning Technology,* 12(2), 113 - 124

Cox, C.M. 1926. *The early mental traits of three hundred geniuses*. Stanford, CA: Stanford University Press.

Craft, A. 2003. Early years education in England and Little c Creativity – The third wave? *The Korean Journal of Thinking & Problem Solving.* 13(1) 49-59

Craft, A. 2008a. Trusteeship, wisdom and the creative future of education. Open Seminar given in *School of Education and Lifelong Learning Seminar Series* at University of Exeter, 1 July 2008.

Craft, A. 2008b. Developing creativity in the early years. Keynote presentation for *Take Art*, Ilminster, Somerset, England. 22 May 2008.

Craft, A. 2008c. Creativity and learning futures? Keynote presentation for *Norfolk County Council and Norfolk Creative Partnerships*, Norwich, Norfolk, England. 27 June 2008.

Craft, A. 2008d. Creative thinkers = powerful minds. A response. Keynote presentation for *5x5x5 Conference, Bath Spa University*, Bath, England, 3 July 2008.

Craft, A. 2008e. Approaches to assessing creativity in fostering personalisation. Discussion paper produced for Department for Culture, Media and Sport, presented at Consultative Seminar: *Assessing the development of creativity: is it possible, and if so, what approaches could be adopted?* London, 3 October 2008.

Craft, A. (in press), Possibility thinking and wise creativity: educational futures in England?   in Kaufman, J., Baer, J. (Eds), *Creativity in the classroom*. Cambridge: Cambridge University Press

Craft, A. (in preparation), Creativity in the School and other sites of learning. For inclusion in Beyond Current Horizons: A DCSF-funded initiative, co-ordinated on behalf of Government by Futurelab, England http://www.futurelab.org.uk/projects/beyond-current-horizons Accessed 12th November 2008

Craft, A., Chappell, K., Cremin, T., Burnard, P., Dragovic, T. 2008. Possibility Thinking: an evidence-based concept driving creative learning? Presented at *British Educational Research Association Annual Conference*, Edinburgh, September 2008.

Craft, A., Twining, P., Chappell, K. 2008. Learners reconceptualising education: Widening participation through creative engagement? *Innovations in Education & Teaching International*, 45(3), 235-245

Craft, A. & Jeffrey, B. 2008 Creativity and performativity in teaching and learning: Tensions, dilemmas, constraints, accommodations and synthesis. Editorial for *British Educational Research Journal S*pecial Issue on Creativity and Performativity in Teaching and Learning, 34(5), 577–584

Craft, A., Chappell, K., Twining, P., Clack, J. 2008. What have we learned about community trusteeship? Learner led school aspiration. Presentation to *SWGate Conference on Gifted and Talented Youth*, Taunton, 7 October 2008.

Csikszentmihalyi, M. 1988. Society, culture and person: a systems view of creativity. In R.J. Sternberg (Ed), *The nature of creativity* (pp325-339). New York: Cambridge University Press

Csikszentmihalyi, M. 1990. The domain of creativity. In M. Runco & R. Albert (Eds.), *Theories of creativity* (pp. 190-214). London: Sage.

de Bono, E. 1992). *Serious creativity: Using the power of lateral thinking to create new ideas*. New York: HarperCollins.

Department for Culture Media and Sport (DCMS) and Department for Education and Skills (DfES) 2006a). *Nurturing creativity and young people*. London:HMSO.

Department for Culture, Media and Sport (DCMS) and Department for Education and Skills (DfES) 2006b. *Government response to nurturing creativity and young people* London:HMSO.

Department for Culture, Media and Sport (Feb 2008). Joint DCMS/DCSF Press Release on the Cultural Offer, 13 February 2008. Retrieved 15 April 2008 from: http://www.culture.gov.uk/Reference_library/Press_notices/archive_2008/dcms009_08.hm .

DCSF (Department for Children, Schools and Families) 2008. *Statutory framework for the early years foundation stage*, Nottingham. DFES Publications.

Department for Culture, Media and Sport (Feb 2008). *Joint DCMS/DCSF Press Release on the Cultural Offer,* 13 February 2008. Retrieved 15 April 2008 from:
http://www.culture.gov.uk/Reference_library/Press_notices/archive_2008/dcms009_08.htm

Dillon, P. 2008. Creativity, wisdom, and trusteeship: Niches of cultural production. In Craft, A., Gardner, H. & Claxton, G. (Eds) *Creativity, wisdom, and trusteeship: exploring the role of education.* Thousand Oaks: Corwin Press.

Facer, K. 2007. Schools Without Frontiers, London, 6 Feb 07 PowerPoint presentation:
www.p4s.org.uk/documents/**Futurelab**presentation060207.ppt   Retrieved 06.02.08.

Fielding, M. 2007. The human cost and intellectual poverty of high performance schooling: Radical philosophy, John MacMurray and the remaking of person-centred education. *Journal of Educational Policy, 22,* 383–409.

Finke, R.A., Ward, T.B. & Smith, S.M. 1992. *Creative Cognition: theory, research and applications.* Cambridge, MA: MIT Press

Fischman, W., Solomon, B. Greenspan, D., Gardner, H. 2004. *Making good: How young people cope with moral dilemmas at work,* Cambridge: Harvard University Press

Fisher, T., Higgins, C., & Loveless, A. 2006. *Teachers learning with digital technologies: A review of research and projects. Bristol: Futurelab*

Florida, R. 2005. *The Rise of the creative class and how it's transforming work, leisure and everyday life.* New York: Basic Books.

Florida, R. 2005. *The flight of the creative class. The new global competition for talent.* HarperBusiness, HarperCollins.

Florida, R. 2005. *Cities and the creative class.* London: Routledge.

Flutter, J. 2007, Developing pupil voice strategies to improve classroom practice, *Learning and Teaching Update*, 3, 5-7.

Flutter, J. 2006 Engaging students as partners in learning, Curriculum Briefing, 3, 3, p.3-6.Flutter, J. 2006 Comment améliorer l'enseignement et les apprentissages? Une expérience anglaise. *Revue Internationale d'Éducation, Sèvres*, 43, 91-104.

Fox, M. 1983. *Original blessing.* San Francisco: Bear & Co

Frechette, J. 2006 'Cyber-censorship or cyber-literacy? Envisioning cyber-learning through media education', p149-71 in D. Buckingham and R. Willett (Eds), *Digital generations: Children, young people and new media.* Mahwah, NJ: Lawrence Erlbaum.

Freud, S. 1908/1959. The relation of the poet to day-dreaming. In *Collected Papers* 14, 173-183. London: Hogarth Press

Galton M, Simon B and Croll P 1980 *Inside the primary classroom.* London: Routledge and Kegan Paul.

Galton, M., Hargreaves, L., Comber, C., and Wall, D. 1999. *Inside the primary classroom: 20 years on.* London: Routledge.

Galton, M. 2008, *Creative practitioners in schools and classrooms. Final report of the project: The pedagogy of creative practitioners in schools.* Cambridge: University of Cambridge

Gammage, P. 1987. The Plowden report 1967. Children and their primary schools: Chinese whispers. *Oxford Review of Education*, 13(1), 95-109

Gardner, H. 1993. *Creating minds.* New York: Basic Books.

Gardner, H. 2007. *Five minds for the future*. Cambridge, MA: Harvard Business School Press.

Gardner, H. 2008. Creativity, wisdom, and trusteeship. In Craft, A., Gardner, H. & Claxton, G. (Eds) *Creativity, wisdom, and trusteeship: exploring the role of education.* Thousand Oaks: Corwin Press

Guilford, J.P. 1950. Creativity. *American Psychologist*, 5, 444-454

Haste, H. 2008. Good thinking: The creative and competent Mind. In Craft, A., Gardner, H. & Claxton, G. (Eds) *Creativity, wisdom, and trusteeship: exploring the role of education.* Thousand Oaks: Corwin Press

Heppell, S., Chapman, C., Millward, R., Constable, M. & Furness, J. 2004. *Building learning futures.* London: CABE/RIBA. http://rubble.ultralab.net/cabe Retrieved 14.12.07

Jeffery, G. (Ed) 2005. *The creative college: building a successful learning culture in the arts*, Stoke on Trent: Trentham Books.

Jeffrey, B. & Craft, A. 2001. The universalization of creativity. (pp 1 – 13). In A. Craft., B. Jeffrey., and M. Leibling (Eds.) *Creativity in education.* London: Continuum.

Jeffrey, B. & Woods, P. 2003. *The creative school: A framework for success, quality and effectiveness.* London: Routledge/Falmer

Kirriemuir, J & McFarlane, A. 2004. *Literature review in games and learning.* London: Nesta FutureLab. http://www.nestafuturelab.org/research/reviews/08_01.htm Retrieved 14.12.07

Knoop, H.H. 2008. Wise creativity and creative wisdom. In Craft, A., Gardner, H. & Claxton, G. (Eds) *Creativity, wisdom, and trusteeship: exploring the role of education.* Thousand Oaks: Corwin Press.

Leadbeater, C. and Wilsdon, J. 2007. *The atlas of ideas: how Asian innovation can benefit us all.* London: Demos.

Mardell, B., Otami, S. & Turner, T. 2008, Metacognition and creative learning with American 3-8 year-olds. In Craft, A., Cremin, T. & Burnard, P. (Eds), *Creative learning 3-11 and how we document it.* Stoke-on-Trent: Trentham Books.

Martin, D. 2008. Mixed-methods research in documenting creative learning. In Craft, A.,Cremin, T. & Burnard, P. (Eds), *Creative learning 3-11 and how we document it.* Stoke-on-Trent: Trentham Books.

Maslow, A. 1968. *Towards a psychology of being*. New York: Van Nostrand

McMaster, Sir B. 2008. *Supporting excellence in the arts: from measurement to judgement.* London: Department for Culture, Media and Sport.   Retrieved 15 April 2008 from:
http://www.culture.gov.uk/NR/rdonlyres/CA3322E5-42AC-4A83-93FC 08EDAAE83831/0/supportingexcellenceinthearts.pdf

McWilliam, E. 2007. From 'Made in China' to 'Created in China': changing our education systems for the twenty-first century. Speech for the 10th China Beijing International High-tech Expo, Beijing 25 May 2007.   Available at: http://www.altc.edu.au/carrick/webdav/users/siteadmin/public/fellowships_ ssociatefellow_paper_ericamcwilliam_may07.pdf   Last accessed 15 August 2008.

McWilliam, E. & Haukka, S. 2008 Educating the creative workforce: New Directions for twenty-first century schooling. *British Educational Research Journal S*pecial Issue on Creativity and performativity in teaching and learning. 34(5), 651-666

McWilliam, E., Hearn, G., Haseman, B. 2008. Transdisciplinarity for creative futures: what barriers and opportunities? *Innovations in Education and Teaching International*, 45(3), 247-253

Mednick,S.A. 1962. The associative basis of the creative process. *Psychological Review*, 69, 220-232

Miell, D., MacDonald, R., Hargreaves, D.J. (Eds) 2005, *Musical communication.* Oxford: Oxford University Press

Miller, M.E., & Cook-Greuter, S.R. 1999, *Creativity, spirituality and transcendence: Paths to integrity and wisdom in the mature self.* Ablex Publishing

Newburn, T. 1996, 'Back to the future? Youth crime, youth justice and the rediscovery of 'authoritarian populism', in J. Pilcher & S. Wagg (Eds) *Thatcher's children? Politics, childhood and society* in the 1980s and 1990s. London: Falmer

Ng, A.K. 2003 A cultural model of creative and conforming behaviour, *Creativity Research Journal,* 15(2 & 3), 223 – 233.

Nisbett, R. E. 2003, *The Geography of Thought,* New York: The Free Press
Pink, D. H. 2005. *A whole new mind: Moving from the information age to the conceptual age.* Riverhead Books.

Osborn, A.F. 1953. *Applied imagination*. New York: Scribner

Perkins, D. 1995. *Outsmarting IQ: the emerging science of learnable intelligence*. New York: Free Press

Prensky, M. 2001. Digital natives, digital immigrants. *On the Horizon*. 9(5), October.

Qualifications and Curriculum Authority 2008a, *Personal, learning and thinking skills*.Retrieved 17th April 2008
    from:
    http://curriculum.qca.org.uk/skills/plts/index.aspx?return=http%3A//curricul*um*.qca.org.uk/skills/index.asp
    x

Qualifications and Curriculum Authority 2008b, Assessing work across subjects. Retrieved 17th April 2008 from
http://curriculum.qca.org.uk/assessment/new_ideas_in_assessment/assess
ng_work_across_sbjects/index.aspx

Rogers, C. R. 1954. Toward a theory of creativity. *ETC: A Review of General Symantics*, 11, 249-260

Rojas-Drummond, S.M., Albarrán, C.D. & Littleton, K.S. (in press), Collaboration, creativity and the co-
construction of oral and written texts. In Special Issue of *Thinking Skills and Creativity*, on "Collaborative
creativity: a sociocultural perspective", Guest Editors K. Littleton, S. Rojas-Drummond & D. Miell, to be published
Autumn 2008

Sandford, R. & Facer, K. 2008. Futures review: looking at previous global futures. Bristol: Futurelab.
http://www.beyondcurrenthorizons.org.uk/findings/futures-review/ (16th October 2008)

Simonton, D.K. 1988. Age and outstanding achievement: what do we know after a century of research?
Psychological Bulletin, 104, 251-267

Simonton, D.K. 1998. Donald Campbell's model of the creative process: Creativity as blind variation and
selective retention. *The Journal of Creative Behavior*, 32, 153-158

Sternberg, R.J. 1996. IQ counts, but what really counts is successful intelligence. *NASSP Bulletin*, 80, 18-23

Sternberg, R.J. 2003. *Wisdom, intelligence and creativity synthesized*. Cambridge, UK: Cambridge University
Press.

Sternberg, R.J. 2006. Introduction. In Kaufman, J.C., Sternberg, R.J. (Eds). *The International handbook of
creativity*, pp 1-9. Cambridge: Cambridge University Press.

Sternberg, R.J. & Lubart, T.I. 1999. The concept of creativity: Prospects and paradigms. In Sternberg, R. 1999.
Handbook of creativity. Cambridge: Cambridge University Press.

Torrance, E.P. 1974. *Torrance tests of creative thinking.* Lexington, MA: Personnel Press.

Troman, G., Jeffrey, B. & Raggl, A. 2007a. Creativity and performativity policies in primary school cultures?, *Journal of Education Policy*, 22(5), 549–572.

Troman, G., Jeffrey, B. et al. 2007b. Creativity and performativity policies in primary school cultures, *Journal of Education Policy*, 22(2), 549–572.

Troman, G. 2008. Primary teacher identity, commitment and career in performative school cultures. *British Educational Research Journal S*pecial Issue on Creativity and Performativity I Teaching and Learning. 34(5), 619-633.

Trotman, D. 2008. Liberating the wise educator: Professional judgement in Educational Practice. In Craft, A., Gardner, H. & Claxton, G. (Eds) *Creativity, wisdom and trusteeship: exploring the role of education.* Thousand Oaks: Corwin Press.

Twining, P., Broadie, R., Cook, D., Ford, K., Morris, D., Twiner, A., & Underwood, J. 2006. *Educational change and ICT: An exploration of Priorities 2 and 3 of the DfES e-strategy in schools and colleges.* Coventry, UK: Becta.

United Nations Environment Programme (UNEP) 2007. *Global environment outlook: environment for development (GEO-4).* London: Earthscan

Wallace, D. & Gruber, H. 1989. *Creative people at work: twelve cognitive case studies.* Oxford: Oxford University Press.

Wallas, G. 1926. *The art of thought.* New York: Harcourt Brace

Weisberg, R.W. 1993. *Creativity: Beyond the myth of genius.* New York: Freeman

Wix, L. & John-Steiner, V. (in press). Peer Inquiry: Discovering What You Know Through Dialogue. In Special Issue of *Thinking Skills and Creativity*, on "Collaborative creativity: a sociocultural perspective", Guest Editors K. Littleton, S. Rojas-Drummond & D. Miell, to be published Autumn 2008

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