

Good thinking; the creative and competent mind

Helen Haste

University of Bath, UK

Harvard Graduate School of Education

helhaste@aol.com

In Craft, A., Gardner, H. and Claxton, G. 2007

Creativity wisdom and trusteeship,

Thousand Oaks, CA: Corwin Press – a Sage Publications Company

How far should we seek to reconcile the three different takes on creativity, ethics and wisdom in the papers by Howard Gardner, Guy Claxton and Anna Craft? How far should we recognise that they are legitimately different perspectives? Howard Gardner concentrates on the responsibilities of those who create or innovate to ensure the ethical application of their work. Guy Claxton asks ‘what is wisdom?’ and in so doing, more implicitly informs us about what is ‘creative’ in wise behaviour and thinking. Anna Craft addresses ethical issues within a cultural context. Her argument is that the purposes or desired outcomes of ‘creativity’ are culturally embedded, and that cultures vary in how they foster creativity (or not). In industrialised Western societies the ‘cult of the new’ is integral a ‘go-getting’, material-rewards version of creativity that is implicit in the ethic of individualism.

I will argue in this paper that the concept of ‘competence’ may be a route to fruitful synthesis. Explicit in Anna Craft’s and Guy Claxton’s analyses, and more implicit in Howard Gardner’s, are four common themes; *flexibility, critical evaluation, taking multiple perspectives, exploring non-obvious options*. All these imply getting outside both the frame and one’s preconceptions, and also considering the larger human and ethical implications – which may not always be obvious, as Guy Claxton’s three vignettes show. These themes are about something we might call ‘generative adaptation’ – a creative response to the management of inevitable ambiguity and uncertainty.

In any discussion of creativity or indeed of ‘competence’, there is an assumption of successful productive future output, of effective adaptation to available resources, and innovative problem-solving. However, emphasis on creativity as innovation – the ‘cult of the new’ that Anna Craft critiques - misses an important issue. Focussing on innovation leads us to ask primarily how people deal with novelty and the unfamiliar. This carries an implication that the new *replaces* the old. In practice the real tension is between managing continuity and managing change at the same time; this is a problem both for culture and for the individual.

It has become increasingly apparent that the traditional problem-solving model, which seeks a single take on the multiple perspectives that we face in contemporary society, does not work; we must instead find ways of dealing constructively with *irreconcilable* multiple perspectives.

A few years ago I was part of an OECD brainstorming seminar on the 'competences that would be needed in the 21st century' (Haste, 2001). The term 'competence' itself implies 'good enough' functioning, rather than innovation. Also, in the context of education, the implication of identifying competences is that they should guide *all* education, not only education for the creative, exceptional or ground breaking. A competence is not just a collection of skills; it is a way of approaching problems and issues, *within which* certain 'skills' are required. The conclusion I drew in working on these ideas was that many of the 'competences' we have been teaching need not just modifying but quite substantially re-thinking.

The problems of prediction

Part of this is about taking the future seriously; in all aspects of education, it is the future to which we direct our sights. But future-gazing is fraught. Our immediate tendency is to extrapolate from the present. The control theorist William Gosling identifies three different ways in which we think about technological change, but these also extend very aptly to much wider areas of the human condition - and profoundly reveal the problems of prediction and planning (Gosling, 1994). The first kind of change is 'More of the same'; it changes little and assumes that things will continue very much as they are now with perhaps minor tweaking. This model informs most of our predictions. The second model, 'Quantity into quality', is the gradual process by which small incremental changes accumulate to make an eventual qualitative difference. This is more difficult to imagine but is still within the skills of the particularly farsighted. In thinking about the future, most scenario-builders work with a model that implies 'more of the same', or very occasionally, 'quantity into quality'.

'The Knight's Move' is the truly transformational version of change. Such changes shock our assumptions and our taken for granted frames of thought and action. In technology, these are often the consequence of a major invention (such as the microchip) which revolutionises both our artefacts and the social practices associated with them. In education, we are often dealing with the fallout, the dramatic changes in social practices that such technological change brings. It is almost impossible for even the most creative person to make a knight's move in thinking about the future because it is so difficult to anticipate the unexpected development – and even more difficult to anticipate the social consequences. This is a salutary thought for educational policymakers. Yet the competences we require are just those that can enable us to deal with a 'knight's move', even if we cannot predict it in advance.

Presenting five key competences

Education of the 21st century child does not just need a few additional add-on skills – 'more of the same' – but requires the capacity for some creative transformation. It was within this thinking that I conceptualised five 'key competences'. I will also argue that in each competence there is both a cognitively creative, and an ethically creative, dimension.

The first competence is *managing ambiguity and diversity*. We have come to understand 'diversity' particularly in the context of a multicultural society. One of the tenets of this understanding is tolerance. However numerous writers have pointed out that 'tolerance' may require little actual cognitive work because it does not *per se* require a shift in perspective-taking; one can 'tolerate' others' views or lifestyles while making no dent in one's own assumptions. To recognise the validity of another's perspective - to manage diversity effectively - one must be able to put oneself in that person's place, at very least to see how one's own position looks from another point of view.

The challenge of managing ambiguity however is broader and in some ways more profoundly novel (and possibly also ultimately more 'creative'). This is because it is not about the *content* of thinking – the potential clash of values – but the *process* of thinking. There is a cultural message frequently transmitted in education which favours linear thinking, linear logic. This is purveyed through such adages as 'stick to the point', 'don't be distracted by irrelevancies', 'look for the single correct answer'. In this context, Anna Craft's comparisons with the more holistic perspectives of Asian thought are salient. The reason that this is important in relation to the *process* of managing ambiguity lies in the way that it engenders anxiety. If children are reared to seek the single right answer and to avoid the messy and the ambiguous, they will become uneasy when confronted with multiple options and solutions. The pursuit of closure, and a deep discomfort with the relativistic or pluralist, are the likely outcomes of exposure to such a cultural message.

However in many areas of life, the mundane as well as the creative, the most effective problem-solving comes through recognising and using multiple possible solutions. The power of cultural representation and how it can mislead our evaluations can be seen in the example of 'multi-tasking'. Once this was an unremarked feature of the largely devalued, inevitable routine of the private realm of female life. Now it has become recognised as an essential competence for all, in both the public and private sphere. In a world that is not only multicultural in terms of ethnicity but multidimensional in terms of the task and social demands which we recognise in wide swathes of our lives, the inability to manage ambiguity is manifestly disabling.

So far I have concentrated on the cognitive-creative aspects of managing ambiguity and diversity but the ethical implications are also very significant. In extreme form, fundamentalism, whether political or religious, reflects a total intolerance of ambiguity and diversity. The psychological inability to manage uncertainty was of course a cornerstone explanation in early work on the

psychology of authoritarianism. Recognising ethical ambiguity is not ethical relativism; it is the ability to appreciate the diversity of ethical perspectives – and one's own position, and positioning, within this. Guy Claxton's vignette of the young aikido expert shows just such a creative switch of ethical perspective-taking.

The second competence I will address is *agency and responsibility*. This is the ability to see oneself as an active agent in one's cognitive, social and moral world, and to be able to take the responsibilities that go with that agency. It is a competence that depends on developing a sense of efficacy, a belief that one can have an effect. Research from developmental psychology indicates that this comes from having early experience of taking responsibility and of being effective, and being in an environment in which there is routine expectation that one will be effective (Haste, 2004)

This is first and foremost an ethical competence. Its creativity lies in being able to position oneself *appropriately* in relation to moral dilemmas and responsibilities, but also in ethically relevant domains such as the community, and socio-political issues. In relation to 'appropriateness' we can again remind ourselves of Guy Claxton's apparently highly 'agentic' aikido expert. Research on the factors which predict taking responsibility in the community and predict making one's voice heard in relation to issues such as social injustice, indicates that the development of agency and responsibility can involve major shifts in perspective taking and positioning. Miranda Yates and others, for example, have shown that participating in community service that is initially motivated by helpfulness can result in an enlarged awareness of the social and political conditions which create disadvantage and deprivation, leading to a sense of personal responsibility to challenge injustice (Yates, 1999; Kahne & Westheimer, 2003; Haste, 2004, 2006).

However, the competence to exhibit agency and responsibility is not solely ethical. The capacity to meet the challenges of the social and physical world require more cognitive versions of creative ‘fixing’ and *bricolage* – a general propensity, for example, to master alien subway systems, to find the right tools or artisan when things break down, to negotiate a turgid bureaucracy, to *know how to* assist the sick stranger in the street as well as feeling that one should do so.

A third competence, I would argue, is *finding and sustaining community*. In the 21st century this goes beyond calling on one’s neighbours and remembering one’s friends’ birthdays. Most obviously, it involves the technological communication resources that are now available. But managing these is a multi-level task. Face to face communication is but one of the routes. Connecting to strangers via a variety of media, and maintaining boundaries around the self within these media, are skills needed even for children. Lamentations about loss of face to face communication (and the skills thereof) ignore their replacement or addition by technological routes, and the skills that go with this.

Apart from obvious technological skills, wherein lies the competence – and the creativity? Firstly, it lies in managing the considerable diversity of contacts, keeping track of one’s virtual friendship world. Secondly, it lies in incorporating and using cultural resources; we must not forget that connecting with someone also means finding shared cultural experience and constructing shared meaning. In both new and longstanding relationships we position ourselves, and are positioned by, the way we access – or do not – shared cultural symbols, resources and narratives, how we find common ground (Clark & Brennan, 1991; Edwards, 1997). One blatant fallout of globalisation is the universality of young people’s sartorial and musical tastes; thanks to MTV, teenagers from almost any culture can find common ground instantly at least in some areas of consumption. Another interesting example is a recent brilliant (and richly informative) advertising campaign by HSBC which capitalises on the dangerous significance

of different cultural meaning, showing us how a polite gesture in one culture is seriously offensive in another.

The fourth competence I want to discuss is the *management of emotion*. Here is an area in which both (Western) culture and science have seen changes in recent decades. Within the dualistic metaphor that suffuses Western culture are purveyed variations of the theme that emotion and reason are distinct and antithetical – such that one poses a threat to the other (Haste, 1994). Different variations – stories - operate in different subcultures. As we move between these we adjust competently to their requirements, but I would argue that most are ultimately not a ‘competent’ way to live either ethically or cognitively.

One story is that emotion *disorganises* reason. According to this, the most effective form of knowing is through logical reasoning; emotion is not a trustworthy source of knowing, and it distorts reason. ‘Competence’ here would be to separate thinking and feeling, and suppress feeling where possible. Another story is that while reasoning is paramount, emotion is needed to energise cognition. ‘Good’ emotion here is the appropriate motivation enabling one to carry through one’s thinking into action. ‘Competent’ emotion management is the ability to direct one’s affect towards following through the tasks one’s cognition has set – willpower, in other words. But reason is still master, and passion is suspect.

The third story privileges emotion over reason; it is the Romantic story. True knowledge comes from listening to the heart; the head’s knowledge is cold and narrowly focused. The Romantic version surfaces at various times in history. In Europe, the Enlightenment – a triumph of reason over passion – met resistance from those who saw what we would now call science as destroying the beauty and meaning of the universe. The more ‘commonsense’ view is that if one does not feel, one cannot understand other people, nor recognise one’s moral obligations to them. The Romantic story re-emerged in humanistic psychology in

the post-war decades, which was trying to find a richer concept of the human than that offered by 'sterile' cognitive science. 'Competence' within this meant getting in touch with one's feelings - which itself presupposes that one has 'lost' touch with them through being brainwashed by the story that valorises reason alone.

A breakthrough story comes from neuroscience and particularly the work of Antonio Damasio. His work with brain-damaged people shows that the boundary between emotion and cognition is artificial, that one cannot function without the other (Damasio, 2003). People without the capacity for emotion are incapable of making effective *reasoned* judgements; it is as though they have lost the 'gut feeling' which tells them when they have arrived at the right answer. His work has been hailed as an essay in what it means to be truly human – and also as an explanation of how all creativity is possible.

However from the point of view of understanding emotional competence, this work tells us that there is more to it than getting in touch with one's feelings. To educate people to be fully human in this way, I would argue that as with the issue of ambiguity, we must first erode the *fear and anxiety* underpinning the conventional separation which fuels the cultural stories. I argued that fear of ambiguity arises from the deep anxiety imbued in the child who is told to find the 'right' answer and avoid complexity. In relation to emotion, the fear in some stories is that the power of emotion can sweep one out of control. In other stories the fear is that cognition is sterile, reductionist, and 'cold' - so therefore not human(e) – nor wise. Where competence lies, in my argument, is in recognising the stories that culture offers, and finding a way to integrate reason with affect, denying neither nor over-privileging either.

Finally, I turn to *technological competence*. This is more than keyboard skills. The most important aspect of this competence, in my view, parallels Piaget's insights into 'adaptation' – that we first assimilate new information into our

existing schemas, transforming it to fit them, and only over time do we accommodate those schemas to make better sense of the new information. The competence – and the creativity – lie in adaptively maximising the implications of novel information. Particularly, this is true of our social practices. New technology initially allowed us to do better, or quicker, what we had always done, but did not at first change what we did. The electric typewriter was more efficient than the manual, and at first, the word processor was used as an elaborated version of this. However, as the potential for the new tool becomes evident through our interaction with it, our technological and our *social* practices change. The manual typewriter was the tool of women educated within a particular spectrum of skills and educational level. The word processor, as part of the whole computer package, quickly became a gender- and status-neutral tool. Keyboard skills are now universal, and the ‘secretary’ has become the PA or administrator. And everyone from six to ninety-six years old who has the technology, expects to do their own email and internet access.

Another example – which also touches on finding and sustaining community – is the cell or mobile phone. This has transformed the social practices of telephoning; one’s phone is now a personal prosthesis not a machine located in one place, which has enormous implications for how we construct our own and others’ accessibility. We have to turn a machine off, not relocate ourselves, to prevent access. An ‘unexpected’ new social practice is texting, which was not predicted by the manufacturers; it now dominates young people’s communication in all areas of their social lives, including developing and ending romantic relationships (Haste, 2005).

The ‘competence’ here is the ability to adapt to the *implications* of technological change, to respond creatively to the new opportunities for social practices (and to ensure that valued practices are not lost). Furthermore, consideration of the ethical implications of all new technology is an increasing part of the public dialogue around science and society (Jackson, Barbagallo & Haste, 2005; Willis

& Wilsdon, 2004). No longer are the ethical issues and social consequences of technological and scientific developments regarded as a peripheral 'add-on', or as the domain of persons far removed from the day to day practice of science – a development which is consistent with Howard Gardner's agenda

Implications for education

'Competences' as I have described them share the commonalities that I identified in the pieces by Anna Craft, Howard Gardner and Guy Claxton; flexibility, exploring the non-obvious options, taking multiple perspectives. Critical evaluation is also a necessary element of competence, but it is a particularly vital task for those who want to rethink our linear assumptions in order to equip young people for contemporary life. All these can be seen as components of the creative 'generative adaptation' I referred to earlier.

What are the implications for education? I would consider that there are three and they are not mere prescriptions for educational practice; they are challenges to the cultural framework within which education takes place – in this case, the Western cultural framework.

- We must explore the domains of anxiety which we currently, unwittingly or otherwise, foster in young people. These include in particular, fear of open-ended or multiple solutions, that there may not be a reassuring single 'right answer' but several possible options. This is particularly important in the area of science education, which often (though not always) seems to purvey the message that science is the pursuit of fact, and that scientific progress depends purely on logic and the proper mathematics. For some children this is in itself reassuring, because it removes worrying doubt. A more realistic account of how science progresses, and greater exposure to the debates in the history of science, not only to the neatly 'factual' outcomes', would help. But in the arts and humanities there are many ways to confront children with the experience of ambiguity in ways that do not permit them to slide into premature closure – the work of M. C. Escher is a good start; tolerating the discomfort of his drawings,

and discussing the implications of this discomfort, not just treating it as a weird excursion, could be both fun and valuable and can be used by even the youngest schoolchild.

- We must find ways the help young people use dialogue as a means of understanding multiple perspectives and positionings, to manage parallel and dissonant points of view without seeking the hegemonic unitary solution – but at the same time teach them to interrogate the values and justifications that underpin each, so that they are not tempted to retreat into relativism, which is not the same as multiple perspective-taking, but in fact an escape from it. It is important, educationally, to distinguish ‘dialogue’ from the more traditional format of ‘debate’, in which one develops a persuasive argument. The skilled debater in fact implicitly uses his or her intuitive understanding of the perspective of the audience (and protagonist) to be an effective advocate. What dialogue requires is stepping back into that process, unpacking the assumptions that the parties in the discussion are making, finding both common ground and areas of incommensurability, as a basis for moving to understanding (if not agreement). To unpack one’s own assumptions is itself quite a task; few of us, even as adults, are fully aware of these. As an exercise in managing conflict, such unpacking has great value in itself, but as an exercise in managing perspective-taking, it is even more useful as the skills developed have spin-offs in both cognitive and ethical areas.

- We must find a way to encourage a view of rationality that does not restrict our resources for knowing to too narrow a cognitive perspective, and also, does not define ‘objectivity’ as the illusory separation of the self from the context – which is an impossible ‘god trick’ to use Donna Haraway’s words (Haraway, 1991). We need to teach that objectivity involves recognising one’s inevitable subjectivity in a situation, and dealing with it in a synthesising manner that allows us to take a whole view of our perspectives, responses and the resources we bring to the situation. There are numerous examples from social science and natural science, as well as more obviously from literature and the humanities, which can demonstrate the embeddedness of the ‘observer’ in the textuality, But as with

the process of unpacking the assumptions we bring to dialogue, in order to make dialogue more effective, we can utilise the variety of perspectives in a classroom to explore how we implicitly value differently, different sources of 'knowing' and how we might be more effective in using this. At very least, the pursuit of the appropriate criteria for 'evidence' falls into this style, but 'evidence' can be narrowly defined as a certain kind of empiricism; to explore and make explicit what school students deem intuitively to be a basis for valid judgements, whether in the social, ethical, aesthetic or scientific domains, is surely the first step to their understanding how evidential reasoning is constructed?

Perhaps we can think of these as weapons of mass deconstruction?

References

- Clark, H. & Brennan, S (1991) Grounding in communication. In Resnick, L, Levine, J. and Teasley, S (eds) *Perspectives on socially shared cognition*, Washington DC: American Psychological Association.
- Damasio, A. (2003) *Looking for Spinoza; joy, sorrow and the feeling brain*. Orlando, FL: Harcourt Inc.
- Edwards, D. (1997) *Discourse and Cognition*, Thousand Oaks, CA: Sage.
- Gosling, W. (1994) *Helmsmen and heroes*. London: Weidenfeld & Nicolson
- Haraway, D. (1991) *Simians, cyborgs and women*, New York: Routledge.
- Haste, H. (1994) *The sexual metaphor*. Cambridge, MA: Harvard University Press.
- Haste, H. (2001) Ambiguity, autonomy and agency; psychological challenges to new competence. In D. Rychen & L. Salganik (Eds.) *Defining and selecting key competences*. Seattle: Hogrefe & Huber.
- Haste, H. (2004) Constructing the citizen. *Political Psychology*, 23(3), 413-439.
- Haste, H. (2005) *Joined-up texting; the role of mobile phones in young people's lives*. Nestlé Social Research Programme Report 3, Croydon: Nestlé Trust.

- Haste, H. (2006) Beyond conventional civic participation, beyond the moral-political divide; young people and contemporary debates about citizenship. *Journal of Moral Education*, 35(4) (in press)
- Jackson, R. , Barbagallo, F. & Haste,H. (2005) Strengths of public dialogue on science-related issues *Critical Review of International Social and Political Philosophy*, 8(3), 349-358
- Kahne, J. & Westheimer,J. (2003) Teaching democracy; what schools need to do. *Phi Delta Kappan*, 85(1 34-40, 57-66.
- Willis, J. & Wilsdon, R. (2004) *Seethrough science*. London: DEMOS.
- Yates, M. (1999) Community service and political-moral discussions among adolescents; a study of a mandatory school-based program in the United States. In M. Yates & J. Youniss (Eds.) *Roots of civic identity*. Cambridge: Cambridge University Press.