

WICKED PROBLEMS, ROTTEN OUTCOMES AND CLUMSY SOLUTIONS: CHILDREN AND FAMILIES IN A CHANGING WORLD

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The circumstances in which families are raising young children have altered dramatically in the past 50 years. While many of these social changes have been beneficial, there have been some unintended side effects that have resulted in negative or 'rotten' outcomes for young people and families. Parenting has become more challenging, and those families with least resources are struggling to raise their children as they (and we) would wish. This paper looks at two major challenges that face us today: how to make sense of the social changes that have occurred and what we need to do to mitigate any adverse effects of these changes. In particular, we need to determine how we can better support young children and their families, particularly the most vulnerable.

One of the key features of the social changes that have occurred is that society has become more complex and interconnected, and that many of the policy and service delivery challenges we face involve very complex or 'wicked' problems. These problems are 'wicked', not in the sense of them being evil in some way, but in the sense of them being complex and difficult to solve. They go beyond the capacity of any one organisation to understand and respond to, and there is often disagreement about the causes of the problems and the best way to tackle them. There is a growing recognition that addressing such problems requires an integrated interagency and interdepartmental approach that simultaneously addresses the multiple ecological factors that impact upon children and families. There is also emerging consensus that we should be seeking to strengthen the universal service system and to back it up with a tiered set of secondary and tertiary services capable of addressing the additional support needs of particular children and families.

While it may be possible to gain agreement among researchers and practitioners about what action to take, reaching a consensus that also involves politicians of different persuasions and diverse community views will be more difficult. Our best chance lies in adopting 'clumsy solutions', that is, policies that creatively combine all opposing perspectives on what the problems are and how they should be resolved. In addition, since we cannot know beforehand the outcomes of actions taken to address 'wicked' problems, we need to be clear about what outcomes we are seeking and monitor these closely and continuously.

INTRODUCTION: CLIMATE CHANGE AND SOCIAL CLIMATE CHANGE

Climate change

It is now accepted that significant changes in the earth's climate are occurring and that these changes come at the end of and as a result of the most rapid period of change in the earth's history (Intergovernmental Panel on Climate Change, 2007; Steffen et al., 2004). The weight of scientific opinion is that human activity has contributed to the changes in the earth's climate, with the main contributing factors being population growth, industrialisation and free market economies (Flannery, 2005; Garnaut, 2008; Intergovernmental Panel on Climate Change, 2007; Steffen et al., 2004).

Social climate change

The same factors that have contributed to climate change have also dramatically altered human societies (Bauman, 2007, 2008; Hughes, Black, Kaldor, Bellamy & Castle, 2007) and the conditions under which families are raising young children (Barnes, Katz, Korbin & O'Brien, 2006; Hayes et al., 2010; Moore, 2008; Richardson and Prior, 2005). These changes are described by Richardson and Prior (2005) in the following terms:

The past half-century has seen a 'great disruption' in the family, in civil society and in the normative framework of intimate relations and reproduction. This has profoundly changed the nature of the family into which children are born and in which they are reared. Children have always relied upon their families for material and emotional support, but the changes mean that family's capacity (and willingness) to provide such support is threatened in the face of: an escalation of divorce; a rise in the proportion of people who live alone; a rapid fall in the size of families; the large-scale movement of mothers into paid work; and the rapid rise in the proportion of children who live in lone-parent or blended families. Each of these factors affects the capacity of the family to care for their children, and some of them have increased the risk of poverty.

These changes have occurred over the last fifty years and have been so rapid, dramatic and unprecedented as to constitute a form of social climate change paralleling environmental climate change (Moore, 2009). While the impact of social climate change on child development and family functioning does not appear to be as dramatic as the impact of climate change on the health of the earth, that may be because we have not fully understood what is happening and because the effects take longer to show.

While the changes have been enormously beneficial in many ways, they have come at a cost we are just beginning to understand. Two ways in which these costs manifest themselves are as 'wicked' problems and as 'rotten' outcomes.

'WICKED' PROBLEMS

One of the rallying cries for government reform in recent years has been the notion of 'joined up solutions for joined up problems' (Clark, 2002; National Audit Office, 2001).

There are several complementary frameworks or ways of understanding the nature of the 'joined-up' problems that face us and how these can best be addressed:

- Social complexity or interconnectedness
- Tame and 'wicked' problems
- Simple, complicated and complex problems
- Complex adaptive systems and emergent complexity

We will look briefly at the first three of these. (For a fuller account of these frameworks, see Moore and Fry, 2011).

Social complexity and interconnectedness

One of the key features of the social changes that have occurred is that society has become more complex and interconnected (Mulgan, 1997). This interconnectedness is a product of many factors, including globalisation of trade and ideas made possible by developments in transport and communication technologies, and the greater density and diversity of populations resulting from population growth and movements.

Our world ... is a complex and dynamic one. Nowadays, most people live in a multitude of constantly splitting, merging and overlapping social domains that are intertwined in ever-changing ways with a wide array of equally dynamic and varied technological and technological domains. (Verweij, Thompson & Engel, 2006).

One effect of this increased interconnectedness is to alter the nature of people's relations with others:

The societal drift today favours interdependence. We are able to connect in forms – and at speeds – that our forbearers could never have imagined. (Blau & Fingerman, 2009)

Some of our modern social arrangements, and the relationships we develop, cannot be pigeonholed into the familiar categories that we have used in the past (Bauman, 2007). We are living in the age of 'networked individualism' (Wellman, 2001): where we were once connected through institutions, we are now linked as individuals. Our communities and social networks are no longer geographically determined, nor have they declined: 'They have just spread out, and we hold them in our minds.' (Blau & Fingerman, 2009).

This increased interconnectedness also alters the nature of the major social and health problems that are facing contemporary societies. There has been a shift in the balance of acute and chronic health conditions with a growing prevalence of chronic conditions (World Health Organisation, 2005). These are conditions that require ongoing management over a period of years or decades, and include diabetes, heart disease, asthma, cancer, depression, and physical disabilities. There are many other chronic

conditions, but the one feature that unites them all is that they typically affect the social, psychological and economic dimensions of a person's life. The major health problems today are 'disorders of the bioenvironmental interface', products of socioeconomic influences on health (such as poverty), health disparities, technological influences on health, overweight and obesity, increasing mental health concerns (Palfrey, Tonniges, Green & Richmond, 2005).

Tame and 'wicked' problems

Many of the most pressing policy challenges involve dealing with very complex or 'wicked' problems (Australian Public Service Commission, 2007). These problems are 'wicked', not in the sense of them being evil in some way, but in the sense of them being complex and difficult to solve. They 'cross departmental boundaries and resist the solutions that are readily available through the action of one agency' (Bradford, 2005). Wicked problems are contrasted with 'tame' problems where the problems are well understood and the solutions known (Conklin, 2006; Wexler, 2009).

Rittel and Webber (1973) coined the term in the context of problems of social policy, an arena in which a purely scientific-rational approach cannot be applied because of the lack of a clear problem definition and differing perspectives of stakeholders. In their words,

The search for scientific bases for confronting problems of social policy is bound to fail because of the nature of these problems...Policy problems cannot be definitively described. Moreover, in a pluralistic society there is nothing like the indisputable public good; there is no objective definition of equity; policies that respond to social problems cannot be meaningfully correct or false; and it makes no sense to talk about 'optimal solutions' to these problems...Even worse, there are no solutions in the sense of definitive answers.

These problems share a range of characteristics (Conklin, 2003; Rittel & Webber, 1973):

- they go beyond the capacity of any one organisation to understand and respond to
- there is often disagreement about the causes of the problems and the best way to tackle them
- the problem is not understood until after a solution has been formulated
- the problem is never solved (completely).

Child protection is a classic 'wicked' problem (Devaney & Spratt, 2009; O'Donnell et al., 2008; Scott, 2006). Locked into reactive models of service delivery and overwhelmed by the growing volume of work, child protection systems everywhere are in a state of perpetual crisis. Most current child protection systems in Australia are not effective in reducing family and community vulnerability to child abuse and neglect, and are even potentially harmful (O'Donnell et al., 2008; Scott, 2006). They are also costly and cannot

be sustained in terms of workforce capacity. As a result, we will always need to spend money to address the result of maltreatment.

Other examples of 'wicked problems' include

- Climate change (Australian Public Services Commission, 2007; Head, 2008)
- Land degradation (Australian Public Services Commission, 2007)
- Indigenous disadvantage (Australian Public Services Commission, 2007; Head, 2008; Hunter, 2007)
- Health inequalities (Blackman et al., 2006)
- Mental health problems in young people (Hickie, 2011)
- Poverty (Fogel et al., 2008)
- Obesity (Australian Public Services Commission, 2007; Egger & Swinburn, 2010)
- Providing services to rural and remote areas (Humphreys et al., 2009)

The key to effective approaches to tackling wicked problems is creating a shared understanding between the stakeholders about the problem, and shared commitment to the possible solutions. This does not necessarily mean that there is complete agreement about the nature of the problem, but that the stakeholders understand each other's positions well enough to have intelligent dialogue about the different interpretations of the problem, and to exercise collective intelligence about how to solve it.

Because of social complexity, solving a wicked problem is fundamentally a social process. Having a few brilliant people or the latest project management technology is no longer sufficient. (Conklin, 2006)

Simple, complicated and complex problems

Another framework that is helpful in understanding 'joined-up' problems is the distinction that has been made between problems that are simple, complicated or complex (Funnell & Rogers, 2011; Glouberman & Zimmerman, 2002; Patton, 2011; Westley et al., 2007):

- *Simple problems.* Baking a cake is a simple problem. It involves following a recipe that gives good results every time, and there is a high degree of certainty of outcome.
- *Complicated problems.* Sending a rocket to the moon is a complicated problem. It involves high levels of expertise and a wide range of skills, but there is a high probability of success, because rockets are similar in critical ways, and sending one rocket increases the likelihood that subsequent attempts will also be successful.
- *Complex problems.* Raising a child is a complex problem. There is no recipe or precise formulae, and raising one child provides experience but no assurance of success with the next. Expertise can contribute but is neither necessary nor

sufficient to assure success. Every child is unique and must be understood as an individual, and the ultimate outcome remains uncertain.

These three types of problems differ in the extent to which cause and effect is or can be known:

- In simple situations cause and effect is known so interventions and their consequences are highly predictable and controllable.
- In complicated situations cause and effect is knowable as patterns are established through research and observations over time, but the many variables involved make prediction and control more precarious.
- In complex situations, cause and effect is unknown *and* unknowable until after the effect has emerged, at which point some retrospective tracing and patterning may be possible.

An example of a contemporary social problem that is both complex and wicked is social exclusion:

Social exclusion is a shorthand term for what can happen when people or areas suffer from a combination of linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health, poverty and family breakdown. In the past, governments have had policies that tried to deal with each of these problems individually, but have been less successful at tackling the complicated links between them, or preventing them arising in the first place. (UK Social Inclusion Unit)

The major health challenges that we face are now more likely to be complex or wicked problems

Human health in city environments is an expression of complex social and environmental interactions not previously faced in our long evolutionary history. The rising tide of 21st century public health problems, such as obesity, cardiovascular disease and depression, are different to past problems that could be directly attributed to infectious agents, toxic chemicals, poor industrial design and a lack of effective environmental management. The new diseases of urban living arise more from the complex way we now live, eat, travel, build, play and work in urban environments, rather than from any single agency. Our health is now an expression of a complex web of interactions that have not been previously faced during human evolution and these interactions are more subtle and indirect in their action. (Kearns, Beaty & Barnett, 2007)

Addressing complex and 'wicked' problems

One of the key features of complex and 'wicked' problems is that we cannot know beforehand what effects particular interventions will have. Attempts to direct or promote certain behaviours are always likely to be subverted by emergent behavioural

patterns. Therefore, we need to monitor our interventions closely, and use an ‘act-then-look’ mind set (McDaniel et al., 2009). The ‘act-then-look’ approach – what Peters (1996) calls ‘ready-fire-aim’ and Snowden and Boone (2007) call ‘probe-sense-respond’ – runs counter to the usual way in which services are planned and provided, which is more along the lines of ‘ready-aim-fire’ (ie. select an intervention, direct it to a specific targeted group, then deliver the service). This approach does not take account of unanticipated reactions to the intervention, nor does it allow for progressive adjustments of the strategy. Therefore, we need an alternative approach: select an intervention, begin delivering it while closely monitoring its effects, then adjust the strategy progressively so as to respond more effectively to the emerging needs of children and families.

‘ROTTEN’ OUTCOMES

While social climate change has been highly beneficial for those living in developed nations, it has come at a cost we are only just beginning to understand. There have been both positive and negative impacts on children, families, communities and services (Moore, 2008; Moore and Fry, 2011).

Adverse outcomes for children have been dubbed ‘rotten outcomes’, referring to a variety of child and adolescent problems, including infant mortality, low birth weight, child abuse, school dropout, juvenile delinquency, substance abuse, teen parenting, and youth violence (Bruner, 2004).

The rates of all these developmental outcomes have risen or are unacceptably high (Bruner, 2004; Eckersley, 2008; Li, McMurray and Stanley, 2008; Perrin, Bloom and Gortmaker, 2007; Stanley, Prior and Richardson, 2005; Richardson and Prior, 2005).

Over the past 30-40 years, the data on Australian children and young people show that many of them are doing better than ever before. Trends in infections, survival at birth and in infancy, accidents and deaths in the primary school years, death rates from severe disease such as cancers, and overall life expectancy have all improved. School retention rates, and participation in university and further education, particularly for girls, have improved enormously.

However, ... when we look at a broader group of indicators, the levels of many problems affecting our children and young people are worryingly high, and appear to be increasing; certainly, they are not improving in the way we would like. (Stanley, Prior & Richardson, 2005)

The developmental pathways that lead to each of these outcomes can be traced back to early childhood. All the poor developmental outcomes identified have associated social and financial costs that cumulatively represent a considerable drain on societal resources.

These worsening outcomes represent an *unintended* consequences of other changes and policies which in other respects have been generally successful (Richardson & Prior, 2005).

Perhaps the most observable instance of a worsening outcome is the rise of obesity in children (Chaput & Tremblay, 2006; Chopra, 2010; Egger & Swinburn, 2010; Lobstein et al., 2010; Maziak et al., 2007). Obesity has become a pandemic, with more than a billion people affected worldwide – it has replaced malnutrition as the major nutritional problem in some parts of Africa, with overweight/obesity being as much as four times more common than malnutrition. Over the past 30 years, the prevalence of overweight children, has tripled (Chaput & Tremblay, 2006). The incidence in of type 1 diabetes in children shows a significant increase over a 15 year period, with the greatest increases in the 0-4 age group. Furthermore, the incidence of type 1 diabetes is increasing even faster than before, pointing towards harmful changes in the environment in which contemporary children live.

The obesity epidemic is best understood not as the outcome of individual greed or lack of discipline (an ‘unnatural response to a natural environment’) but as the outcome of an ‘obesogenic’ environment (and hence a ‘natural response to an unnatural environment’)(Egger & Swinburn, 2010). An obesogenic environment is one that promotes obesity through the combined effects of a range of factors, including ready access to energy-dense but nutrient-poor processed foods and reduced levels of exercise (Swinburn et al., 1999). Efforts to reduce levels of childhood obesity through interventions aimed at the individual level have not proved very successful so far (Crowle & Turner, 2010; Maziak et al., 2007) and need to be complemented by efforts to moderate the physical, social and economic environmental factors promoting obesity (Delpeuch et al., 2009; Maziak et al., 2007).

Other indices of child health and well-being that have been nominated as worsening include asthma; hay fever and other allergic reactions, such as eczema; food allergies; onset of puberty; anorexia nervosa; self harm; attention deficit disorders; autism spectrum disorders; lupus; and multiple sclerosis.

Addressing ‘rotten’ outcomes

Many responses to ‘rotten outcomes’ are ‘engineering’ solutions that seek to ‘fix’ the presenting problem. As Ehrenfeld (2008) shows, this approach fails to address the problems that underlie the presenting problems. Used repeatedly, the ‘engineering’ approach can produce toxic side effects.

Much has been made of the need to switch the focus of services from treatment to prevention and promotion (eg. Allen Consulting Group, 2009; Cohen, Chavez and Chehimi, 2010; Cowen, 2000; Stagner and Lansing, 2009). Many of the models showing the relationship between universal, targeted and treatment services depict the universal level of service as providing services to and addressing the needs of all children and families and promoting general health and well-being. This is sometimes called primary prevention.

Many interventions that are described as being primary prevention or early intervention programs focus on the symptoms (such as parenting problems or family dysfunction) rather than seeking to address the underlying causes of the problems. While it is important to take action to address the problems that people are experiencing, it is equally important to understand and address the circumstances or experiences that led to the problems developing (Daro, 2009; Daro and Dodge, 2009). There needs to be a level of intervention that is true primary prevention or pre-prevention (O'Connell, Boat and Warner, 2009; Maziak, Ward and Stockton, 2007; Stagner and Lansing, 2009). This would address the conditions under which families are raising young children rather than relying exclusively on the services that families need.

An illustration of the problems in trying to fix a presenting problem is the experience of the Bill Gates Foundation (BGF) in trying to eradicate polio in Africa (Guth, 2010): despite spending \$700 million in direct efforts to eradicate polio, the incidence in Africa is actually growing. The question being faced by the BGF is whether it is better to wage war on individual diseases like polio, or pursue a broader set of health goals simultaneously—improving hygiene, expanding immunizations, providing clean drinking water—that do not eliminate any one disease, but might improve the overall health of people in developing countries. The BGF has developed a new strategy that integrates both approaches, acknowledging that disease-specific wars can succeed only if they also strengthen the overall health system in poor countries.

'CLUMSY' SOLUTIONS

As noted earlier, efforts to reform the way governments do business have been driven by calls for 'joined up solutions to joined up problems'. The social challenges facing us are 'joined up' in the sense of being the product of a web of densely interconnected physical, social and economic factors. Efforts to address individual health or social problems through the traditional services and forms of intervention are not proving successful, hence the push for 'joined up' approaches. This involves linking the efforts of different service sectors and departments and tackling social problems at multiple levels simultaneously.

Efforts to build coordinated approaches to addressing wicked problems are hampered by the fact that people do not agree on what should be done or even what the problems are. According to cultural theory (also known as grid-group cultural theory or theory of socio-cultural viability) (Douglas, 2007; Mamadouh, 1999; Thomson, Ellis and Wildavsky, 1990; Verweij, 2007; Verweij, Douglas, Ellis, Engel, Hendriks, Lohmann, Ney, Rayner and Thompson, 2006; Verweij and Thompson, 2006), this is because people understand social and political issues from a strictly limited number of alternative perceptions of reality. These alternative ways of perceiving the world justify, represent and emerge from alternative ways of organizing social relations. There are four primary ways of organizing, perceiving and justifying social relations: (1) egalitarianism, (2) hierarchy, (3) individualism, and (4) fatalism. These four 'ways of life' are in conflict in every conceivable domain of social life.

Verweij et al. (2006) show how these four perspectives shape people's views of climate change and social relations:

- From an *egalitarian perspective*, nature is fragile and intricately interconnected, and man as essentially caring (until corrupted by coercive institutions such as markets and bureaucracies). We must all tread lightly on the earth, and it is not enough that people start off equal; they must end up equal as well.
- From a *hierarchical perspective*, the world is seen as controllable. Nature is stable until pushed beyond discoverable limits, and man is deeply flawed but redeemable by firm and long-lasting institutions. Fair distribution is by rank and station or, in the modern context, by need (with the level of need being determined by expert and dispassionate authority).
- From an *individualistic perspective*, nature is seen as resilient – able to recover from any exploitation – and man as inherently self-seeking and atomistic. Trial and error, in self-organizing ego-focused networks (unfettered markets), is the way to go, with Adam Smith's invisible hand ensuring that people only do well when others also benefit.
- From a *fatalistic perspective*, there is neither rhyme nor reason in nature, and man is seen as fickle and untrustworthy. Fairness is not to be found in this life, and there is no possibility of effecting change for the better.

Other accounts of how this framework can be applied in different fields can be found in Verweij and Thompson (2006) and fourcultures (2009).¹

This classification of alternative ways of organizing and perceiving social relations captures the contradictory ways in which people approach all kinds of public policy issues. Indeed, these perspectives, in varying strengths and combinations, are evident almost anywhere we look – from debates over the wisdom of prescribing safety seat belts, or the different ways in which international regimes cope with transboundary risks such as water pollution, or the changing definition and treatment of the mentally ill by public authorities. Thus, four straightforward organizational principles can result in an endlessly changing, infinitely varied, and complex social world (Verweij et al., 2006; Verweij, 2007).

Each of these perspectives (1) distils certain elements of experience and wisdom that are missed by the others; (2) provides a clear expression of the way in which a significant portion of the populace feels we should live with one another and with nature; and (3) needs all of the others in order to be sustainable. Successful solutions to pressing social ills tend to consist of creative and flexible combinations of these various ways of organizing, perceiving and justifying social relations. Verweij and colleagues (2006) call such arrangements 'clumsy solutions', contrasting them with 'elegant' solutions that favour a single perspective over the others.

‘Clumsy’ solutions in human services

When we consider the practice and policy issues that continually challenge the human services field in general and early childhood services in particular, we can see that many of these are contested, with people having widely divergent views on how the issues in question can best be addressed. Examples include the following:

- Early childhood curricula based on play and respect for the child or on direct instruction in pre-academic skills
- Models of child care provision – government-funded, not-for-profit or commercial enterprises
- The economic argument for funding early childhood services versus the child rights argument
- Welfare strategies based on support and empowerment versus punitive strategies for ensuring compliance
- Deficit-based versus strength-based approaches
- Paternalistic versus partnership approaches
- Managerial output-based approaches to ensuring effective service delivery versus devolved responsibility for outcomes
- Child rearing (and its outcomes) as the sole responsibility of parents, or as a shared responsibility of all society, or as requiring strong government intervention

Each of these dichotomies (or trichotomies) can be mapped onto the four-way cultural theory framework. Thus, in the case of the last example (regarding responsibility for child rearing), the three positions represent individual, egalitarian and hierarchical perspectives respectively. The ‘clumsy’ solution approach championed by Verweij and colleagues (2006) suggests that we need creative and flexible combinations of these divergent views if we are to find stable and sustainable ways of resolving them.

‘Clumsy’ solutions in politics

What can happen when groups fail to arrive at clumsy solutions is illustrated by the current impasse in the US between Republicans and Democrats over measures to reduce federal debt. In search of a solution, President Obama floated certain ideas that would be normally unheard of from a Democrat, such as drastically reducing the size of government over a decade, but groups within the Republican Party rejected this deal.

In an op-ed piece in last week’s New York Times, columnist David Brooks comments of these groups,

All of these groups share the same mentality. They do not see politics as the art of the possible. They do not believe in seizing opportunities to make steady, messy progress toward conservative goals. They believe that politics is a cataclysmic

struggle. They believe that if they can remain pure in their faith then someday their party will win a total and permanent victory over its foes.

Such attitudes are contrary to clumsy solutions.

CONCLUSIONS AND IMPLICATIONS

Conclusions

Both climate change and social climate change need to be understood systemically. This is the point that Steffen et al. (2004) make about global climate change:

Somewhat more than a decade ago it was recognised that the Earth behaves as a system in which the oceans, atmosphere and land, and the living and non-living parts therein, were all connected. While accepted by many, this working hypothesis seldom formed the basis for global change research. Little understanding existed of how the Earth worked as a system, how the parts were connected, or even about the importance of the various component parts of the system. Feedback mechanisms were not always clearly understood, nor were the dynamics controlling the system.

This is also true of social climate change: the social forces that result in worsening outcomes act as a system in which all factors are connected. Understanding how these forces interact and collectively shape the health and well-being of children and their families is the challenge that is facing us. The vast majority of research, however, is focused on one or other of these factors in isolation from all others, and the solutions generated seek to rectify one symptom at a time. At best, these solutions will provide temporary symptomatic relief only: sustainable change can only result from efforts to understand and work with the social system as a whole.

Implications

Re 'wicked' problems

- We need to recognise that many of the problems policy makers and services face are complex and that interventions to address them will need to be multilevel, capable of addressing the needs of children, families and communities, as well as the circumstances under which families are raising young children.
- We cannot know beforehand what will work, but we must choose a course of action based on a blend of best evidence, what people most value, and what is possible
- Having identified what outcomes we are seeking, should monitor the effects closely and change practice promptly if required

Re 'rotten' outcomes

- In a complex and rapidly changing world, there are bound to be unintended consequences of change
- Not all changes are negative – we should avoid being too alarmist – but we do need to be watching for negative consequences – they can be altered
- ‘Rotten’ outcomes in a complex and interconnected world will rarely have single causes, but are the product of multiple factors
- We need to focus on the underlying conditions that produce problems rather than only seeking to remedy presenting problems - attempting to tame ‘wicked’ problems by addressing the behavioural symptoms will not lead to long-term solutions.

Re ‘clumsy’ solutions:

- No one knows the truth – there *is* no definitive truth – so a workable truth has to be co-constructed by all participants
- All voices must be heard and accommodated – this will require new forms of partnership and collaborative governance arrangements
- Only through such a process will we arrive at a solution that everyone has a stake in, and that will be less likely to be thrown out at a later stage when there is a change in power

NOTES

1. My thanks to Andy Moore for bring the *fourcultures* website and the particular entry on education reform to my attention.

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