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School Leadership: shaping a sustainable future, or a slave to neo-liberalism?

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ABSTRACT In the increasingly fragmented education service in England, with evertightening systems of accountability from central government, one might assume that leaders have less scope for pursuing their own agendas. However, with the diminished role of local authorities and the rise of academies and faith and free schools, it can be argued that headteachers have more freedom than ever to act as they see fit, albeit while needing to be cognisant of league tables. Many leaders seem to be suffering from a case of Stockholm syndrome (Stockholm syndrome occurs when a victim of kidnapping forms an emotional attachment with the kidnappers and ends up joining them), in that the reductionist agenda permeates the way they and their schools operate and they are passive and compliant in the face of this. This situation is inextricably bound up in the neo-liberal paradigm, which values individualism above collectivism and 'benevolent' marketisation above notions of well-being and happiness. Should leaders actively challenge these notions in favour of a philosophy more in tune with environmental sustainability?

Introduction

This article is at its essence polemical, written from my perspective as a primary school leader and environmentalist who wishes to highlight what he considers to be the myopia of education leaders across all sectors in the face of extreme environmental threats. Many of these are well known and global in nature (e.g. climate change and mass extinctions), while others are less well known (e.g. microscopic plastic pellets in oceans and harmful effects of 'false oestrogens'). It appears that education has been largely sidelined in any discussions on how to alleviate them, or at the very least cope with them. The discourse hardly seems to feature in any mainstream research, literature or academic conferences

pertaining to education leadership. I argue that the predominance of a neo-liberal paradigm has effectively stifled any meaningful analysis of what type of education leaders might be needed to help society cope with environmental challenges faced today and in the future. Moreover, neo-liberalism has become so dominant that any questioning of it from the left or the right is deemed as 'extreme' and therefore potentially dangerous, or at the very least irrelevant. If this is the case, who or what is stifling discussions about vital global issues which are almost absent from the National Curriculum? Should we be looking for conspiracy theories at the heart of government linked to the interests of the corporate sector?

Before this can be explored further, below is an interpretation of neoliberalism, followed by one which encapsulates education for sustainable development (ESD). From this, I aim to outline why the two seem incompatible and why advocates of ESD are so few and far between in mainstream education. This is linked to the paucity of discussion about the aims of education in relation to environmentalism among the fraternity of practising education leaders.

Neo-liberalism, through the way it pervades narratives of school improvement, also seems to constrain the academic study of types of leadership and management, as these tend to only concentrate on leadership strategies and actions which result in easily measured pupil attainment outcomes. Although leadership values are also discussed in this context, they seldom extend to values which relate to the protection and nurturing of the world's biosphere, or to the deficit in social justice associated with the worst forms of exploitative businesses and trade.

The final part of this article will look at possible reasons ESD values are squeezed by neo-liberalism and why I would like to see school leaders break free from these strictures in order to create an education service fit for the twenty-first century and beyond.

Overview of Neo-liberalism

The theory of neo-liberalism is a vast subject in itself, which this article can only précis. Harvey (2005) encapsulated it as follows:

Neoliberalism is a theory of political and economic practices that propose that human beings can best be advanced by liberating entrepreneurial freedoms and skills within an institutional framework characterised by strong private property rights, free markets and free trade. The role of the state is to create and preserve an institutional framework appropriate to such practices. The state has to guarantee, for example, the quality and integrity of money. It must also set up those military, defence, police and legal structures and functions required to secure private property rights and to guarantee, by force if need be, the proper functioning of markets. Furthermore, if markets do not exist (in areas such as land, water, education, social

security or environmental pollution), then they must be created by state action if necessary. But beyond these tasks, the state should not venture. State intervention in markets ... must be kept to a bare minimum because ... the state cannot possibly possess enough information to second-guess market signals (prices) and because powerful interest groups will inevitably distort and bias state interventions (particularly in democracies) for their own benefit.

Neo-liberalism has an emphasis on globalisation. This is exemplified by the bodies such as the International Monetary Fund (IMF), the World Bank (WB) and the World Trade Association (WTA) which regulate global finance and trade and make sure that neo-liberalism is hegemonic as a mode of discourse. This reflects the theories of academics such as Milton Friedman, working out of the University of Chicago, who advocated a blend of capitalism and socialism. However, the socialism element of this did not have much time for organised labour, or political organisations of the left. This was amply illustrated when the US government, through the CIA and various large corporations, engineered a coup in Chile following the overthrow of the dictator General Pinochet in 1973. It was masterminded by a group of Friedman-trained economists, known as 'The Chicago Boys', who reconstructed Chile's economy along neo-liberal lines with the support of Chilean business elites. Force was used to repress any dissenters, particularly those of the left.

Neo-liberalism has gone by other names, such as 'Thatcherism', 'Reaganism', 'Consumer Capitalism', 'The Washington Consensus' and 'Anglo-Saxon Economics'. Whatever the label, it was certainly the central driving force behind Margaret Thatcher's government from 1979, which in itself had been influenced by Friedrich Hayek's book *The Road to Serfdom* written in 1944 (and republished in 1979). He maintained that socialism killed liberalism and that marketisation with a hint of state control would be best for individual consumers.

Within this context it is easy to understand why the English Great Education Reform Bill (quaintly nicknamed 'GERBIL') of 1988, once enacted, created local management of schools (LMS), open enrolment, formula funding and a facility for schools to 'opt out' from local authority control by becoming 'grant maintained', a forerunner of the academies and faith and free schools we see today. All this began the decline of local authority control which continues to this day. It also created the National Curriculum, a national system of testing from the age of seven and a national system for inspections (Ofsted). So on the one hand 'power' was devolved to schools in terms of budget and day-to-day running, while the state created a national curriculum and accountability framework which included school league tables based on the testing of literacy, numeracy and science in primary schools at the age of 11. Note that the other curriculum subjects were only teacher assessed and not reported nationally, hence the decline of most of these subjects along with cross-curricular approaches. Later, science testing in primary schools was stopped, which placed

an even greater emphasis on literacy (now called English) and numeracy (now called maths) and caused a further erosion of the importance of other subjects. Further note that the National Curriculum and testing in primary schools was never extended to the private sector. This meant that this sector had more freedom to have a rich curriculum in terms of sports, sciences and arts.

The other, more subtle intention of GERBIL was to create a market in state education so that parents would have far more choice in where to send their children to school. Proponents of opening up education to market forces had a strong belief that it would lead to more rapid school improvement. For example: 'A more market-like environment ... act(s) as a motor for school improvement and for creating a more responsive school system' (OECD, 1994, p. 19).

By looking at league tables and comparing Ofsted reports, parents could vote with their feet and ensure their children went to the 'best' schools. This would mean that successful schools could expand as each child was individually funded and poor schools would either be taken over or shut down. This market was only really a 'quasi-market', because in reality only certain parents could vote with their feet, or, to be more accurate, drive or bus their children to the schools of their choice. Also, certain schools in certain postcode areas could guarantee success merely because they were surrounded by middle-class families whose children had fewer special needs and who came to school already far ahead in terms of language acquisition and socialisation than those from more disadvantaged backgrounds. Even if a parent from a disadvantaged area chose such a school, there would literally be no room, or the school could reject on grounds of their carefully constructed admissions policy (which in effect could filter out potential 'problem families'). The converse was true for schools that mainly catered for disadvantaged children. This postcode apartheid still exists and in many cases has got worse as the element of so-called choice has widened through academies and faith and free schools.

In effect, the onus for improving every local school through the state had been abandoned in true neo-liberal style, by the state creating 'favourable' conditions for the market to do the job for it. The fact that governments of the right and left have not reversed any of this shows how neo-liberalism has permeated the mainstream, leaving little alternative.

Overview of ESD

Although there are many models for environmental sustainability, Figure 1 shows one of the more straightforward models which has a synergy between environment (green), social (human rights and justice) and economic (production, consumption and waste) issues.

Sometimes this is represented as the 'three pillars of sustainability' (see Figure 2), although at face value this representation does not stress the interrelationship between the three main elements. The interrelationship between these three areas determines whether or not we have a planet capable

of maintaining modern human life for the indefinite future. At the moment this does not seem to be the case as we are consuming far more than the planet can replenish. Simms (2009) developed a calculation which showed the date each year on which humanity has exhausted nature's budget, with local resource stocks being drawn down for the rest of the year and carbon dioxide accumulating in the atmosphere. In 2014, this 'Earth Overshoot Day' was 19 August, and it keeps retreating back each year as the global economy makes the world less sustainable. Thus we have problems of over-consumption and global inequality which cause obesity/malnutrition and poor mental health.

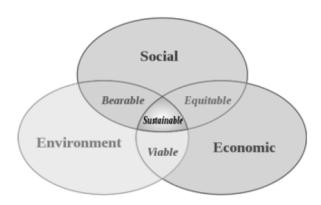
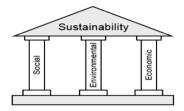


Figure 1. A sustainability model.

This interrelationship can be looked at from a range of perspectives: from individual actions, through local, regional and national communities right up to the global level and how these influence each other. The ESD slogan 'Think Global Act Local' highlights the feedback loop between the micro and macro. A classic example of this is the 'butterfly effect', whereby the theory goes that a single flap of a butterfly wing can trigger a hurricane on the other side of the world. Although seemingly far-fetched, the mathematics of chaos theory suggests that it is possible. Whatever the science says about this, metaphorically it encourages people to realise that what they do as an individual matters, and it also shows the value of collective action, which can snowball from humble beginnings. Social media encouraging issues to go 'viral' is a recent example of this effect: see Paul Mason's blog 'Twenty Reasons Why It's Kicking Off Everywhere' (Mason, 2011), which was a critique of capitalism and which was eventually read by hundreds of thousands of people worldwide.

So, interrelationships are at the core of the sustainability paradigm and the way of understanding it. Essentially, it stresses holistic epistemology in relation to knowledge and understanding, and the fact that connections between things (and this can be literally *anything*) are just as important as the things themselves.



Social sustainability is the ability of a social system, such as a country, family, or organization, to function at a defined level of social well-being and harmony indefinitely. Problems like war, endemic poverty, widespread injustice, and low education rates are symptoms a system is socially unsustainable.

Environmental sustainability is the ability of the environment to support a defined level of environmental quality and natural resource extraction rates indefinitely. This is the world's biggest actual problem, though since the consequences of not solving the problem now are delayed, the problem receives too low a priority to solve.

Economic sustainability is the ability of an economy to support a defined level of economic production indefinitely. Since the Great Recession of 2008 this is the world's **biggest apparent problem**, which endangers progress on the environmental sustainability problem.

Source: http://www.thwink.org/sustain/glossary/ThreePillarsOfSustainability.htm

Figure 2. The three pillars of sustainability.

Economic Sustainability

It mirrors the principles of living systems which are dynamic, flexible, yet have very complex interdependence between their component parts, and it has strong relationships with post-modernism and quantum theory. Some writers call this 'ecological thinking', and it can be contrasted with the mechanical thinking paradigm as shown in Figure 3.

Although I am an advocate for ecological thinking, this is not to say that this paradigm is 'superior' to the mechanical paradigm; rather, it is another illustration of how dominant mechanical thinking is. However, as the modern mechanical approach was a product of the Enlightenment and was the driving

force behind technological innovation and the development of industrial production, it is hardly surprising that the mindset it encapsulates is still at the forefront of the western economic and social narrative and its approach to education (see Ken Robinson's critique of this [Robinson, 2010]). It can be argued that neo-liberalism has elements of ecological thinking, but the fact that it is inextricably wedded to economic growth means that mechanical thinking dominates.

Mechanical	Ecological
Problem solving	Appreciative/Reframing
Analysis	Synthesis
Reductionism	Holism
Closed cause/effect	Multiple influences through time and space
Narrow boundaries	Extension of boundaries
Atomistic/Segrative	Integrative
Objectivism	Critical subjectivity
Dualism	Puralism/Duality
Rationalism	Rational/Non-rational ways of knowing
Determinism	Uncertainty, Tolerance, Ambiguity

Figure 3. Mechanical thinking contrasted with ecological thinking. *Source*: Sterling, 2004, p. 58.

When applied to education, ecological thinking can be at odds with reductionist, positivist perspectives, particularly in primary schools where cross-curricular approaches can blur the knowledge demarcation and classification of *subjects*. It is also more in tune with holistic leadership styles such as generative leadership (Klimek et al, 2008), which recognise and embrace interrelationships and do not seek simplistic short-term solutions, often based on numerical criteria, to drive 'school improvement' [sic].

Generative leadership is also an example of 'systems leadership', but one has to be careful not to associate it too closely with ESD. Although it emulates ecosystems of the natural world by seeing organisations as systems rather than structures, this sort of leadership might not deliver ESD outcomes if the values contained within were to support the mechanistic paradigm.

ESD can also be said to have two main forms. These have been called ESD1 and ESD2 (Vare & Scott, 2007), and they are paraphrased below.

ESD1 is about children and students building up a sound knowledge of sustainability through the study of mathematics and the natural and social sciences, and also through aesthetic appreciation of the world around them through literature and the arts. This knowledge acquisition and spiritual development breaks through artificial subject boundaries, hence the above reference to cross-curricular approaches.

ESD2 encourages children and students armed with knowledge to develop critical-thinking skills and to become activists for change (i.e. if they

find out about an environmental problem, then the moral imperative is on them to do something about it). This is where ESD can become contentious, because of the danger of an enthusiastic proponent of it propagandising and seeking to brainwash young minds into becoming rabid environmentalists. However, the antidote to this is the previous point about developing critical thinking, which should be forensic and as far as possible objective. If young people develop this properly, they will treat all information and situations sceptically, including the propagandising of the neo-liberal agenda through corporate and government information networks. If, for instance, each consumer really is 'informed', then they will question the ethics of the manufacture, selling and disposal of products and might also question whether buying 'stuff' all the time is good for the planet or whether indeed they really need the 'stuff', or whether it can deliver on advertiser promises of eternal happiness etc. (see 'The Story of Stuff' [Leonard et al, 2007] for a critique of this).

Leadership Values

From my own doctoral research (Dixon, 2009) and that of others such as Jackson (2007), it would seem apparent that it is deep-seated values that underpin the motives and modus operandi of leaders. Bush (2005, p. 5) says that 'three dimensions underpin all leadership models' – namely, *influence, values* and *vision.* This would include formal and informal models.

The 'values bell' (see Figure 4) shows how values beget beliefs which beget attitudes which beget opinion which beget behaviour, with consequent feedback loops which usually reinforce the values. This model shows how deep rooted values are and how integral they are to any given person. The question arises as to how much they may have to be compromised due to external pressures. If this is extreme, then a great stress can arise through cognitive dissonance, and the moral compass of a leader can be skewed.

Ryan (2008, p. 7) says: 'Values are specific belief systems about what is right and wrong for our lives. They are often about what makes life worth living ... leaders consider what values they want children (and) ... teachers to have (and) demonstrate and model on a daily basis.' The agenda of 'what makes life worth living' has been so dominated by the neo-liberal paradigm that it has inevitably been linked to monetary value, rather than to less easily defined criteria around notions of happiness and well-being. Although ex-British Prime Minister David Cameron once made reference to a Happiness Index (see www.happyplanetindex.org), this has not been at the forefront of his or any other mainstream party's political agenda, despite academics such as Layard (2003) showing that the acquisition of money and possessions have diminishing returns in terms of how good people feel.

Gross domestic product (GDP) still features as part of the neo-liberal agenda. Simon Kuznets, an economist at the National Bureau of Economic Research, presented the original formulation of GDP in his report to the US Congress, 'National Income, 1929-35'. His idea was to capture all economic

production by individuals, companies and the government in a single measure, which should rise in good times and fall in bad. By 1962, Arthur Okun, staff economist for US President John F. Kennedy's Council of Economic Advisers, had coined Okun's Law, which holds that for every three-point rise in GDP, unemployment will fall one percentage point. The theory informs monetary policy: keep growing the economy, and everything will be just fine. Although other measures are used today, GDP is still the one that hits the headlines and which is still used in common and professional parlance to judge 'how well' a country or region is doing, rather than how happy most of the people are. This is not implying that I believe in the existence of the 'noble poor' or 'happy but poor', as these are idealised concepts of the non-poor.

The Values Bell Impact on the environment Levels I do Behaviour Physical I think Opinion Intellectual I feel **Attitudes** Emotional/ Psychological I believe Beliefs Values Spiritual/ I value Philosophical Experience of the environment

After Zarine Katrack 2003

Figure 4. Influence of values.

It is this economic imperative which has served to damage the standing of professionals such as teachers, with education being criticised for not creating the 'right sort' of productive people (although this criticism has been in place since the nineteenth century). Bottery (1998, p. 3) argues that before the 1950s, the behaviour of professionals (including teachers), was defined by certain traits centred around three concepts paraphrased thus: *expertise* (possession of exclusive knowledge and practice); *altruism* (an ethical concern for clients); and *autonomy* (control over entry into the profession and subsequent practice). This has been eroded over time, and quite rightly, one can argue; however, some of this erosion has been caused by the neo-liberal paradigm which has overridden many of the individual values of leaders, causing the Stockholm syndrome or cognitive dissonance described above.

Wright (2015), writing in an email to members of the teacher/lecturer union AMiE/ATL, says:

In too many schools and colleges leaders and managers act as internal inspectors — spending their time monitoring teacher performance rather than creating a culture in which effective teaching and learning can flourish. The culture of compliance that has emerged under the pressure of the current accountability system is bad for teacher morale, bad for professionalism and bad for developing the collaborative, dialogue-based approach the OECD says is the hallmark of successful education systems around the globe.

Note that this is the same OECD (Organisation for Economic Co-operation and Development) that advocated the marketisation of education in 1994. Wright goes on to quote Sir Thomas More to show the moral dilemma facing education leaders today:

'If we lived in a state where virtue was profitable, common sense would make us saintly. But since we see that avarice, anger, pride and stupidity commonly profit far beyond charity, modesty, justice and thought, perhaps we must stand fast a little, even at the risk of being heroes.'

Fromm (1934), cited in James (2007), argued above all things for joy in life rather than the living death he perceived around him in the affluent post-war USA. For him the choice was 'to have' or 'to be', based on Marx's notion that 'a man is the one who *is* much, not the one who *has* much' (James, 2007, p. 47). Fromm has been much disparaged, possibly because his work spanned the disciplines of psychology, politics, economics and philosophy with a sprinkling of Buddhist spiritualism. A classic case perhaps of academia not liking a crosscurricular approach, but preferring the power base of subject silos (unlike in the best primary schools!).

Conclusion

Although neo-liberalism has the potential to have environmentalism at its core, it does not because it seems inextricably wedded to economic growth and the associated mechanistic and individualistic narrative. The definition above spoke of how 'powerful interest groups will inevitably distort and bias state interventions (particularly in democracies) for their own benefit', and this has always been endemic in western-style capitalism. Cave and Rowell (2014) documented the history of this and showed how insidious the influence of big business has been over the decades. For example, the New Labour think tank Social Market Foundation, which was set up to see how social justice could be melded into neo-liberal economics, was funded by corporates. The environment will never be a central part of neo-liberalism when financial interests control

government think tanks or use sophisticated lobbying to promote a growth narrative rather than one pertaining to sustainability. One can also argue that this central characteristic of neo-liberalism is incompatible with sustainability and with a 'well-rounded' education, which should question society's direction of travel and also offer young people more than just the means of being individual units of consumption. If we perpetuate the narrative of knowing the price of everything and the value of nothing, then indeed we are living in the Age of Stupid.[1]

Yet education leaders seem not to have the big picture of environmental degradation on their radar. Some scientists think we are entering a new geological epoch called the Anthropocene which has been caused by human activities in the last 100 years. Harari (2014) in his book *Sapiens* documents the destructive nature of *Homo sapiens* (us!) ever since we emerged about 70,000 years ago. Wherever *Homo sapiens* spread, the local flora and fauna drastically diminished, and this has accelerated exponentially since the Industrial Revolution. Despite developing a sophisticated culture, our species has systematically pillaged the biosphere until we have reached crisis point, where we may be on the brink of irreversible climate change, potentially leading to the breakdown of ecological systems needed to maintain our civilisation.

Education leaders, like other members of the general population in rich countries, have been insulated from the effects of climate change etc. because of their geographical location. They have also been insulated from it by the system they serve, which itself serves the neo-liberal paradigm. Marshall (2014, p. 242) says: 'Our psychological response – our acceptance, avoidance or denial – has [determined] which path we will take [and] we are rapidly losing any future options for control or choice.'

Another factor which is preventing education leaders from becoming part of the solution is that many have benefited from the development of the quasimarket. Today we have head teachers and executive head teachers who have done very nicely out of the neo-liberal dominance. They have had increased salaries and power as the influence of local authorities has diminished. They have embraced being judged by reductionist criteria which have consolidated their positions and large salaries. Why would they want to deviate from their successful [sic] path? To compound the problem, the younger leaders coming through to more senior positions have largely no background in environmental education, or no social background linked to the natural world. This means their value systems are not attuned to ESD and they have no moral compass guiding them in that direction.

Leaders for sustainability have to buck the system, take more risks and run the gauntlet of a system which they are not in tune with. The sustainable schools agenda has been largely sidelined since 2010 (not that it was at the top of the agenda before then) and shows no signs of resurgence. Mainstream academia is not helping because of the aforementioned lack of interdisciplinary work and the lack of study into alternative value systems and the paradigms that are associated with them.

Leadership models come and go, but the values needed for sustainability are barely investigated. A notable exception in this field is Professor Mike Bottery, whose interest in values in education has in recent times extended into leadership for sustainability.

Whatever leadership model is most appropriate in schools or elsewhere, perhaps the following should be considered:

The world is not indefinitely large. We cannot simply hurl ourselves at it with the abandon of the past 10,000 years ... [which] has allowed the most exploitative-experimental people to rise inexorably if fitfully to the top, [and] has ceased to be appropriate. Yes our economies are geared to the exploitative-experimental approach... So all of a sudden, or so it seems, our political and social institutions and philosophies are out of sync with the biological and physical realities of the planet. It might be unrealistic to devise new systems that are radically different, with a radically different motivation; but if we do not do this we cannot seriously contemplate long-term survival. (Tudge, 1996, p. 342)

It is my contention that neo-liberalism as a philosophy should no longer have exclusive rights to control the dominant narrative, and where better to challenge this than in the education sector, where we have the enormous and vitally important task of preparing the next generation for their future? If this future is to be a 'happy' one for the majority, then a more progressive economy and society needs to be developed which goes well beyond the short-termism of the 'business as usual' model. If nothing else, education leaders need to become more aware of the challenges, rather than being part of the system which is fuelling (in many ways quite literally) the problem.[2]

Notes

- [1] http://www.spannerfilms.net/films/ageofstupid
- [2] For leadership programmes that advocate the type of values and practices described in this article, see courses at Schumacher College and the Natural Change Experience developed by David Key. Alternatively, the author of this article, along with partners Commonwork and WWF(UK), has developed a course called 'Leading for the Future' (see http://assets.wwf.org.uk/downloads/leadingforthefuture_finalreport.pdf). In addition, leaders can revisit materials developed in conjunction with the National College for School Leadership and the Department for Children & Families in 2007 (see http://www.rm.com/_RMVirtual/Media/Downloads/National_Framework_S ustainable_Schools_poster.pdf).

References

- Bottery, M. (1998) *Professionals and Policy: management strategy in a competitive world.* London: Continuum.
- Bush, T. (2005) Theories of Educational Leadership and Management. London: SAGE.
- Cave, T. & Rowell, A. (2014) A Quiet Word: lobbying, crony capitalism and broken politics in Britain. London: Bodley Head.
- Dixon, D. (2009) Developing a Green Leader Model for Primary Schools, EdD dissertation, University of Lincoln.
- Harari, Y.N. (2004) Sapiens: a brief history of humankind. London: Random House.
- Harvey, D. (2005) A Brief History of Neoliberalism. Oxford: Oxford University Press.
- Hayek, F.A. (1944/1979) The Road to Serfdom. London: Routledge and Kegan Paul.
- Jackson, L. (2007) Leading Sustainable Schools: what the research tells us. London: WWF.
- James, O. (2007) The Selfish Capitalist. London: Vermilion.
- Klimek, K.J., Ritzenhein, E. & Sullivan, K.D. (2008) *Generative Leadership Shaping New Futures for Today's Schools.* Thousand Oaks, CA: Corwin.
- Layard, R. (2003) 'Happiness: has social science a clue?' Lionel Robbins Memorial Lectures 2002-03 at London School of Economics. https://www.researchgate.net/publication/246357210_Happiness_has_social_science_a_clue
- Leonard, Annie, Fox, Louis & Sachs, Jonah (2007) The Story of Stuff. http://storyofstuff.org/movies/story-of-stuff/
- Marshall, G. (2014) Don't Even Think About It: why our brains are wired to ignore climate change. London: Bloomsbury.
- Mason, P. (2011) Twenty Reasons Why It's Kicking Off Everywhere. http://www.bbc.co.uk/blogs/newsnight/paulmason/2011/02/twenty_reasons_why_its_kicking.html
- Organisation for Economic Co-operation and Development (OECD) (1994) School: a matter of choice. Paris: Centre for Educational Research and Innovation (CERI), OECD
- Robinson, K. (2010) Changing Education Paradigms. www.ted.com/talks/ken_robinson_changing_education_paradigms
- Ryan, W. (2008) *Leadership with a Moral Purpose: turning your school inside out.* Bancyfelin: Crown House Publishing.
- Simms, A. (2009) Ecological Debt: the health of the planet and wealth of nations. London: Pluto Press.
- Sterling, S. (2004) Sustainable Education: re-visioning learning and change. Bristol: Green Books.
- Tudge, C. (1996) The Time Before History: 5 million years of human impact. New York: Scribner.
- Vare, P. & Scott, W. (2007) Learning for a Change: exploring the relationship between education and sustainable development, *Journal for Sustainable Development*, 1(2) (September), 191-198.

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