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Refocusing Educational Leadership in an Age of Overshoot: Embracing an Education for Sustainable Development

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Abstract: *This article argues that many of the aims and objectives of educational leadership need to be re-focused upon a largely neglected issue, that of an education for sustainable development (ESD). Research suggests that the concept of ESD – and particularly the interrelationships between environmental, social, and economic sustainabilities – is not fully appreciated by many school leaders, and yet this is an essential precondition for educational action. This article suggests one way in which this area might be conceptualised, and argues that an appreciation and development of more sustainable schools should lead to a refocusing of the work of educational leaders. Such refocusing would also present new challenges for educational leaders, for it will initiate debates about what constitutes a 'good society', about permissible levels of economic growth and consumption, about how to address current and future problems, and what actions need to be taken to achieve these.*

Introduction: The Need to Critique Educational Status Quos

Educational leadership, suggest Ribbins & Gunter (2002: 359), has historically been 'insulated by its characteristically pragmatic and essentially atheoretical tradition', and they further suggest that a research agenda needs to be built which identifies priorities within the field. They attempt

to classify 'the kinds of claims made within 'knowledge domains' (2002: 371) that underpin different types of research into leaders, leading and leadership, and propose five such knowledge domains: the conceptual, the critical, the humanistic, the evaluative and the instrumental. For them, 'leadership [must be] an educational and educative relationship ... informed by a critical engagement with the social sciences and philosophy' (Gunter & Ribbins 2002: 388). Such elements, they argue, require that researchers go back to first base and ask questions such as:

- What should educational leaders be concerned with?
- What ideals should educational leaders be influencing their colleagues towards?
- How do local, national and global contexts affect this activity?

Asking such questions will in many cases lead to critiques of existing status quos. Where, for instance, neo-liberal policies facilitate greater competition through the development of markets in health, education and transport, leadership practice needs to be informed by philosophical and political critiques of such policies, because of their impacts upon cultural and educational values and practices (e.g. Burbules & Torres 2000; Bottery 2004; Ball 2008). In thus providing the study of educational leadership with a wider and deeper view of its functions and purposes, such leadership is made more relevant and useful to the societies within which its practice is located.

Yet some impacts on leadership theory and practice are less direct, occurring through their conjunction with other forces, like population growth and consumption practices. This is particularly true with respect to impacts not only upon environmental sustainability, but on social and economic sustainability as well. When market forces, for example, are permitted to largely determine the level of use of global resources, and when populations in developing countries seek the consumption levels of the developed world, the combination of these pressures can together lead to sustainability limits being overshot. Now, the practice of educational leadership is located not only within particular economic and social frameworks, but within natural environments as well. So how such pressures impact not only upon cultures

but upon educational institutions within them makes this necessarily an important area for educational leadership practice to address, and for educational leadership research to examine. This paper then argues that a detailed understanding of the interrelationships between environmental, social and economic sustainabilities is an area with which educational leaders need to be familiar. This paper describes not only such understandings, but how they need to reframe the focus of educational leadership. A first place to begin is by unpacking the terms involved.

Defining Sustainable Development

When it comes to definitions of this area, there are both misunderstandings and disagreements. The most famous definition of sustainable development was provided by the United Nations Commission on Environment and Development (the Brundtland Report), which defined it as a sustainability that 'meets the needs of the present without compromising the ability of future generations to meet their needs' (UNWCED 1987: 8). Whilst this definition has been widely copied, it was a product of compromise, largely because of an international reluctance to accept a reduction in economic growth in order to achieve environmental sustainability. Such interests were then accommodated by the argument that sustainability could be achieved by and through economic growth – now heavily critiqued (Daly 1996; Hamilton 2004, Jackson 2009), as increased growth and consumption habits are now seen as principal causes of *un*sustainability.

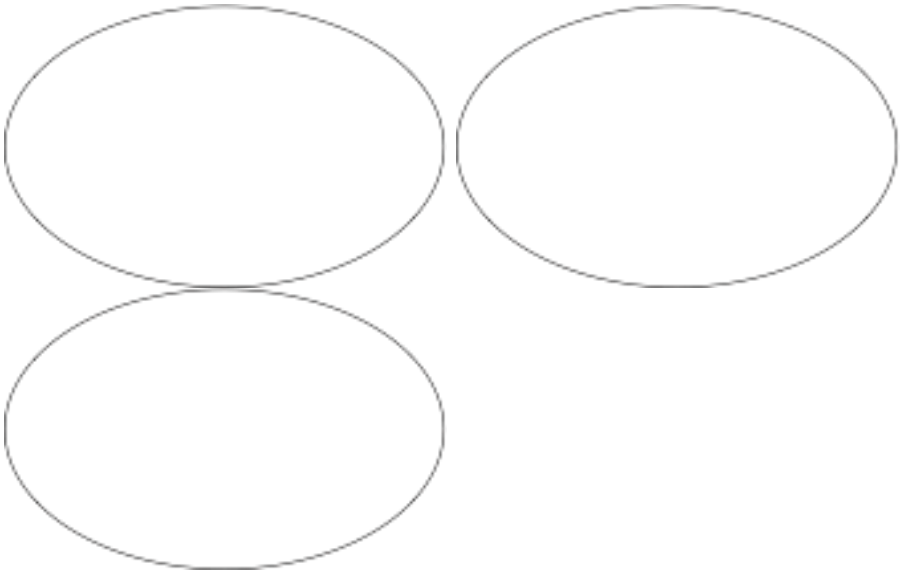
Another useful definition was contained in a UNESCO report which suggested that sustainability 'is not a fixed notion, but rather a process of change in the relationships between social, economic, and natural systems and processes' (1997: 13). In arguing thus, it suggested that an appreciation of 'sustainable development', and therefore of an 'education for sustainable development' (ESD), required an understanding by educational leaders of the complex interrelationship between three different kinds of sustainabilities – the environmental, the social and the economic.

This view is encapsulated in the Venn diagram described by Shallcross & Robinson (2007), sustainable development being that space where these three areas overlap (Figure 1).

However, the report also went on to argue that 'there can be no solution to

environmental problems unless the social and economic ills besetting humankind are seriously addressed' (UNESCO 1997: 17). Environmental sustainability then is increasingly affected by – even

Figure 1: Sustainable development as a Venn diagram



dependent upon – the economic and social actions of human beings, and humanity then has enormous responsibility for the natural environment, with politicians, citizens and educators of all forms beholden in promoting its good stewardship. Yet an increasingly large number of writers point out (Greider 2003; Hamilton 2004; Jackson 2009; Stiglitz, Sen & Fitoussi 2010) that current dominant economic theories almost completely fail to recognise the relationships described in such understandings, ignoring not only the responsibility that humanity has for the condition of the natural environment, but also the dependency of a healthy economy upon a healthy society and environment. As Webster & Johnson (2009: 140) argue, 'the economy is a wholly owned subsidiary of the environment', as indeed is the social world. Yet actors within the social and economic arenas behave as if

they have little relationship to it, or bear little responsibility for it. This may be due to the continued acceptance of ideologies and practices from times when people had little impact on the environment globally, but which, this paper argues, are inappropriate now.

How Sustainable Are We?

So how sustainable are we? A few thousand years ago, when the total human population was only a few million, the planet's resources massively exceeded human demands. Functioning primarily as small groups of hunter-gatherers, when the resources of an area were exhausted humans simply moved to another area . However, as populations grew, as the majority became farmers, so these groups became larger, more static, more dependent upon the resources of particular areas of land. It was due to such actions that the first civilisations were created – and also why some collapsed as resources were over-exploited (Fagan 2005; Diamond 2005). Much later, the industrial revolution placed even greater demands upon the planet's resources, as well as on its ability to absorb the waste by-products of such industrial production(Hawken 2010). Had humanity been sufficiently prescient and technically capable, it might have attempted to measure the earth's capacity and the demands that humanity was placing on it. It might then have attempted to limit both its demands and its population in order to avoid overshooting the earth's resources. Even though various strands of religious thought have suggested that humanity has the earth in trust, and must conserve it by living within its limits, the predominant approach has been to see the earth as something to be controlled and exploited. Contrary thoughts are only just beginning to re-appear; in 1968 Boulding was in a minority in suggesting that we live on a spaceship earth, yet treat it as if we were cowboys, and that the measure of well-being is not how fast the crew is able to consume its limited stores, but rather how effective the crew members are in maintaining their shared resource stocks, and the life-support system on which they all depend. (Boulding 1989: 136)

So what is the current state of the relationship between human resource demand and the earth's capacity to provide these –in terms of both its renewable resources (fish, forests, arable land) and its non-renewable resources (coal, oil, gas)? Is humanity consuming within the earth's capacity, managing a successful balance, or overshooting in its demand? In an authoritative survey of global sustainability, Meadows, Randers & Meadows

suggest that 'humanity is already in unsustainable territory' (2004: xiv). However, they go on to argue that 'the general awareness of this predicament is hopelessly limited' (2004: xiv). More recently, the World Wildlife Fund (WWF 2008) arrived at a similar conclusion in declaring that 'humanity is already in unsustainable territory', and that humanity has not been at sustainable levels since the 1980s. Others (such as Lynas 2004; Stern 2006, 2010; and IPCC 2007) suggest that such consumption demands have created a pattern of climate change close to permanent overshoot. There are more pessimistic commentators (e.g. Kunstler 2005; Rees 2005; Lovelock 2006) who believe not only that we have overshot, but that the situation is probably not recoverable, producing societal collapses within a few decades. The vast majority of informed scientific opinion is more optimistic, but whilst the pessimistic camp may have the odd fringe lunatic, it also contains a worrying number of sober scientists: Lovelock is an internationally renowned scientist, and Rees is the past President of the British Association for the Advancement of Science. It is not possible to dismiss such concerns as the rantings of the obsessed. If one were to judge the situation purely on the best available opinions, humanity should be very concerned, and so, one would have thought, should its schools and their leaders.

Causes and Impacts of Overshoot

Overshoot, then, is caused when the growth in the rate of consumption of a resource exceeds the capacity of a system with finite limits to reproduce that resource, or to absorb the waste created by such usage. This notion of a *finite* capacity is very important, for if economic and social sustainability are both ultimately dependent upon a finite environment, then it is imperative to consider the permissible levels of extraction and consumption. It may even lead to societies embracing an imperative concept of sufficiency of consumption (Princen 2005), where human activities are judged as only allowed when their exercise leaves the environment in the same condition as before they had begun. Such a position would demand that human activities need to defer to environmental concerns, and if they cannot be achieved then it is the activities which must change and not the state of the environment.

Whilst such overshoot may be thought of simply as a matter of resource overuse, this paper will argue that it is the forces *causing* such overuse

which need to be examined. This paper will examine three principal causes behind such overshoot. The first is the influence of current economic assumptions upon consumption habits. The second is the need to address the inequitable distribution of resources globally, for reduction in consumption is unlikely to occur globally if a way is not found to balance the need for growth and consumption overall with poorer countries' (legitimate) desire to achieve a standard of living comparable to richer countries. The third is the impact of expanding human populations on such consumption.

Economic Assumptions

We currently live in a world where one particular view of economic activity has hegemonic control: it is a neo-liberal version which sees economic growth as the principal measure for evaluating economic performance. Essential preconditions for such success are seen as the liberalisation of trade through the use of unfettered markets, allied to an underpinning belief that privatisation is a more efficient way of achieving such success. This constellation of beliefs has important implications for the relationships between the economy, society and the environment.

Increased growth is then seen as providing the greater buying power assumed to provide the well-being that populations seek; global institutions such as the IMF and the World Bank also see it as the best way to address global poverty, and as the principal means of financing new projects and initiatives. Yet such championing of economic growth has considerable implications for the environment, as it tends to mean an approval of greater levels of the exploitation of resources, with much less regard to when such exploitation overshoots the environment's ability to replenish such supply.

Such growth threatens not only environmental sustainability, but economic and social sustainability as well, for as Daly (1996: 6) argues, it fails to recognise 'that the economy is a subsystem of the environment, and depends upon the environment both as a source of raw material inputs and as a "sink" for waste outputs', and when this environment is depleted and polluted, this damage necessarily affects human economic and social systems.

One then needs to ask whether unfettered economic growth is economically, socially or environmentally sustainable, and whether it needs to be questioned as a self-evident good. In an age of overshoot, does it need to be

challenged by other values, such as sustainability and a wider concept of well-being (Layard 2006). Whilst sustainability may sound like stagnation or even regression to some, it does not need to be seen as such. As J.S. Mill said over a century ago, a stationary condition of capital and population implies no stationary state of human improvement. There would be as much scope as ever for all kinds of mental culture and moral and social progress. (quoted in Meadows et al. 2004: 257)

In asking what makes a good or rewarding society, then, different moral, political, social and aesthetic values and practices can be championed, the adoption of which may in the longer term be much more rewarding than current emphases upon economic growth and personal consumption. This is a major challenge for any society, and its educational institutions and their leaders are pivotal in raising and discussing the problems associated with such change, and with the framing of educational and societal values which focus upon other ways of viewing societal development – the 'mental culture and moral and social progress' of J.S. Mill.

The Distribution of Resources

When it comes to the distribution of resources, it is important to remember that historically the developed world has consumed a vastly disproportionate amount of the world's resources, and also contributed the highest rates of emissions and pollutants. The USA, for instance, whilst containing only 5 per cent of the world's population, consumes over 25 per cent of its resources. It is unsurprising if developing countries desire a similar standard of living. Yet this is potentially highly dangerous, for, as Diamond (2005) points out, China is due to overtake the USA as the world's largest producer by 2030, and has already overtaken it as the world's largest emitter of greenhouse gases. Its prodigious economic growth has been purchased at enormous cost to its own and the global environment, threatening the quality of the life of present and future communities. As Diamond argued, 'the world cannot sustain China and other third world countries and current first world countries all operating at First World levels' (2005: 376).

Yet if the world cannot sustain the ambitions of the Chinas and Indias of this world, then a recipe for both environmental disaster and conflict is created. If the pursuit of economic growth by all countries to developed-world levels is not sustainable, then it seems inevitable that the mantra of

economic growth must be challenged. Yet poorer countries are hardly going to accept standards of living below those of the developed world; in the circumstances, the least worst solution may need to be something amounting to permitting a degree of growth for the developing world, whilst the developed world reduces its own demands. The task of envisaging well-being as embracing things other than growth and consumption may then become important, perhaps essential, activities for societies in the not too distant future, and therefore for their educational institutions.

If such compromises and re-orientations are not considered, if there is no sustained pressure to tackle global inequalities as a means of reducing some of this differences, then, as Homer-Dixon (2006) argues, the consequences for world peace could be dire. Some small moves in this direction are being considered or are already happening: one is the cancelling of some third-world debt; the designing of carbon-trading schemes which favour developing countries is another; providing aid to poorer countries to develop more efficient technologies is a third; a fourth would be aid to clean up some of the current pollution. These would help lower greenhouse gas emissions, benefitting both developed and developing countries alike (Ghosh & Watkins 2009). Such actions on their own will not eliminate discord, but they might produce the ground upon which better communication and co-operation, and hence social sustainability, is furthered. Such changes are real challenges for educational leaders, as they need to understand the dynamics of these processes and to consider their schools as places of critical thought for challenging elements of the current status quo. This will not always be a role readily accepted.

Recognising the Impact of Demographic Developments

If such issues – transforming the current global economic paradigm, and ensuring that there is greater equity in provision of global resources – were not enough, there is another significant factor to consider. This is that the world's human population is projected to grow by the middle of the twenty-first century from six and half billion to around nine billion (Munz & Reiterer 2009), which simply means that there will be that much more demand for what exists. If there is overshoot currently, there is the danger of even greater overshoot with such a huge expansion in global populations.

Moreover, and making the situation even more problematic, Demeny (2003) points out that this increase in population will be distributed differentially, with the largest population growth in poorer countries, potentially exacerbating a growing difference in wealth between the rich and poor, as well as increasing competition over diminished resources. If a world is created where the rich few pull up their drawbridges and use their power and money to reserve the majority of resources to themselves, conflict and terrorist attacks are likely to be even more prevalent than they are today (George 2010).

So there are strong connections between all three of these issues. Reductions in poverty, a principal goal of social sustainability, for instance, would probably lead through the phenomenon of demographic transition (Munz & Reiterer 2009) to greater population reduction. This argues that fertility rates are high in preindustrial societies in order for families to compensate for high mortality rates. However, as nutrition, health services and hygiene improve, death rates begin to fall, and family size declines, thus gradually reducing population growth. Such birth-rate reduction is even more marked when women are given better education and more employment, and the opportunity to access family planning methods. There is a benign circle to be exploited here: better living standards and accompanying better education (particularly for women) are strongly correlated with lowering birth rates, which then furthers better living and education standards ... and so on. As they do so, measures to reduce population size can be a principal plank in reducing the effects of zero or negative economic growth.

This discussion then points to three immensely difficult issues which politicians hardly dare mention – and which seldom make it onto school curricula or underpin educational policies or values, and yet which urgently need to be understood. The first is that, in a current situation of overshoot, the expansion of the world's population by 2–3 billion is probably unsustainable if current dogmas of consumption and growth are adhered to. The second is that if the world is to be made more socially sustainable for future generations, then an avoidance of increased conflict and terrorism will be best resolved by a more equitable global distribution of wealth and resource consumption. Finally, and probably most importantly, the acceptance, and even embrace, of 0 per cent or negative economic growth may be a more responsible conception of economic sustainability than current concerns for increased economic growth (Jackson 2009; Stiglitz et

al. 2010). These are all political hot potatoes, particularly in an era of economic recession, but educators need to recognise and understand them, and add their voices to the debates. How well informed are schools and their leadership about such issues currently?

Where is School Leadership Currently?

Perhaps surprisingly, focus on this area by schools has been slow, and leadership reaction relatively lukewarm. An overview by Shallcross & Robinson (2007: 143) concluded that 'official curricula rarely mandate sustainability, and teacher certification guidelines rarely mention sustainability'. They continue:

There is also a lack of policy to support ESD, a lack of awareness of the importance of ESD; a lack of support from ministries of education, and a lack of communication of efforts between ministries of environment, education, health, agriculture and others. (2007: 143)

In England, the DfES (2006) publication *Sustainable Schools* declared that the government wanted all schools to be 'sustainable schools' by 2020, and suggested the adoption of three core principles – caring for themselves, for others, and the environment – which were to be approached through eight 'doorways'. Yet a 2008 Ofsted document, whilst describing some examples of good practice had to conclude that 'most of the schools visited had limited knowledge of sustainability and work in this area tended to be uncoordinated, often confined to special events rather than being an integral part of the curriculum' (Ofsted 2008: 4). The result was, they felt, that 'its impact tended to be short-lived and limited to small groups of pupils'. Worryingly, they concluded that ESD was regarded by most schools as a 'peripheral issue' (Ofsted 2008: 5). In similar vein, the NCSL (Jackson 2007: 43) pointed out that there is a serious mismatch 'between what schools are saying about the importance of sustainability and what they are doing'. Finally, a comprehensive desk review of the research by Symons (2008: 3) strongly echoes above: the research suggests that 'the majority of schools have limited knowledge of sustainability, work on sustainability tends to be piecemeal and uncoordinated, and its impact tends to be short-lived and limited to small groups of pupils'.

One recent academic attempt at linking leadership to sustainability has been

that of Harris (2008). This attempts a description of what a sustainable school should look like, provides some useful examples of good practice, and details aspects of the care agenda, the involvement of stakeholders and ways of utilising the British government's suggestion of eight doorways. These are all helpful, but, by not discussing either the science or history of these concerns, the description fails to point up the deep economic and political conflicts within and between societies which must be addressed if this situation is to be resolved.

Thus, whilst some schools and their leaders think this is an area of considerable importance, there is limited evidence of its sufficient understanding, and only limited examples of good practice. Yet it would be wrong to lay the blame wholly at the feet of schools: part of the reason for its lack of detailed consideration may well come from governmental economic emphases in education (see Barry & Patterson 2004; Huckle 2008), and fears of straying beyond inspection-defined boundaries, as well as mounting volumes of paperwork (Bottery, Ngai, Wong and Wong 2008). The result is then likely to be as much a lack of time in appreciating the complexities of this area as anything else.

Five areas of leadership understanding

When Meadows et al. (2004: xiv) suggested that humanity was in unsustainable territory, they argued that this was because currently 'we lack the perspectives, the cultural norms, the habit, and the institutions required to cope' (2004: 2). The school could play a pivotal role here, and its leaders could be key players. Most already possess attributes derived from a professional ethic of care in ensuring the best for not only this generation, but for subsequent ones as well. Yet, whilst such care may be necessary, it is not sufficient. A young child may care that his or her mother is upset after an argument with her partner, yet can do little about the situation if he or she cannot understand the causes of the argument or the means to its resolution. The leadership of ESD is similarly challenging and complex, and requires a number of key understandings.

This section suggests that there are four elements which need to be addressed.

A first is an understanding of the science behind sustainability in terms of

the fragility of ecological networks, and the human impact upon them. This is not an issue which should be left to the specialist teacher, for it is only by mastering these issues that the seriousness of the current situation is fully recognised, and only then is there likely to be a full engagement with debates concerning radical changes to the high-consumption, energy-dependent approaches currently dominating societal attitudes.

A second understanding therefore lies in mastering the history of the problem, and the distribution of responsibility for its causation. This is likely to be uncomfortable for some, for it will become clear that the developed world has historically been the major exploiter of resources and polluter of the environment. Yet a recognition of such responsibility, at all levels, is essential for the achievement of any global agreements on the distribution of remediative action.

This leads to the need for an understanding that causations and resolutions of current unsustainabilities lie not just at the local level, but at the national and global levels as well. Much of current practice seems to be located at the local level, and there are good reasons for this: the need to integrate learning with student experience and understanding, and the opportunity for schools to have an visible effect in this area. Nevertheless, national and global political and economical issues currently impede the resolution of these issues, and schools need to accept this and work towards a better understanding.

A final appreciation is that the interrelationships between the three forms of sustainability require linkages between a large number of traditional subject disciplines, such as economics, politics, history, geography, biology and chemistry, and newer disciplines such as environmental studies, ecology, anthropology and sociology. Yet, as UNESCO (1997: 21) points out, whilst it is impossible to predict what issues of sustainability people will be grappling with in the decades to come, 'such developments will not fit neatly into the existing and artificial sub-divisions of knowledge which have been in place for more than a century'. The OECD (quoted in Chapman, Flaws & Le Heron 2009: 136) echoes the same thought: curricular approaches in primary and secondary schools are 'legitimatized by the disciplinary structures of higher education ... the role of the university in defining what knowledge consists of in modern societies is so central that EE [environmental education] is permanently impaired until the universities regard it as a serious topic'.

Educational leaders then need to accept that an effective ESD requires a trans- or interdisciplinary frame. If, as UNESCO (1997: 24) argues, learning about ecological processes involves 'market forces, cultural values, equitable decision- making, government action and the environmental impacts of human activities in a holistic interdependent manner', then a uni-disciplinary model is simply inadequate. Educational leaders need to be competent and confident in such an interdisciplinary reframing of issues.

The Reframing of Educational Leadership

Gunter & Ribbins (2002: 388) argued that leadership needs a critical engagement with the social sciences and philosophy in asking what educational leaders should be concerned with when attempting to influence their colleagues. This paper has argued that sustainable development is an area of critical importance, and involves an understanding of the interrelationships between environmental, social and economic sustainabilities. With evidence suggesting that many school leaders have failed to engage sufficiently with these issues, it has argued that they need to embrace not only an understanding of social science and philosophy, but also the science and history of such interactions and impacts. This suggests that a mastery of such understandings refocuses educational leadership in at least five ways.

A first is the need to increase the focal length – to refocus every action in terms of a long-term perspective. This is for two reasons. A first is that environmental changes are likely to be long term rather than short term in nature, and multi-generational in their impact. Taking the short- term view – so characteristic of many current approaches to school appraisal and inspection, and associated CPD – is therefore likely to obstruct such understanding, and contribute to the problem rather than help resolve it. The depletion of the ozone layer, for instance, universally celebrated for its resolution by the banning of CFCs twenty years ago, in actual fact will continue well into the middle of this century (Benedick 1989). Similarly, the rise in global temperatures will rise by 1.5oC, regardless of the action taken now, for similar reasons. The second reason follows from this: those most likely to be affected by such changes will be future generations. It is surely morally reprehensible for one generation not to care for the effects of its action upon subsequent generations, and educational leaders need to be at the forefront of attempts to alleviate the problems which those alive today

are creating for those yet to be born (see also Partridge 2003; Garvey 2008).

A second refocusing is a greater acknowledgement that the environment is paradoxically robust but also very fragile. There are numerous cases of it bouncing back after disasters (such as the re-establishment of flora and fauna around the St Helens volcano after its eruption); yet it has tipping points, when a system under pressure dramatically collapses, and there is increased recognition of this possibility becoming a probability (Lenton, Held, Kriegler, Hall, Lucht, Rahmstorf & Schellnuhuber 2008). The environment, then, is not infinite in its capacity to renew itself and absorb waste: on the contrary, it has a finite capacity, which already may have been exceeded. In such circumstances, educational leaders need to convey a message that environmental sustainability in many cases may need to be the benchmark by which human action and values are judged. This would involve considering an imperative concept of sufficiency (Princen 2005), where resource exploitation and pollution are only permissible when they didn't damage the environment in any way.

This leads naturally to a third re-focusing, from a 'use and dump' approach to production and consumption, to one predicated upon 'closed loop thinking' (see Webster & Johnson 2009; Braungart & McDonough 2009). The use and dump approach to natural resources is inherited from the Industrial Revolution, and has led to a view of economic prosperity derived from the extraction of non-renewable materials, the pollution of air, water and soil, and the production of toxic wastes, the effects of all of which will be inherited by future generations. Such an approach also requires an extensive regulatory system to limit the effects of such dumping. Many countries are now moving beyond this towards an intermediate position, in which attempts are made to lessen the extraction of non-renewable materials and replace their use with renewable ones, to lessen the pollution created by industrial processes, or to clean up such pollution through regulatory activity. Yet this half-way house adopts similar approaches to the first: 'recycling', for example, normally means 'down-cycling' – the use of materials in a less productive manner which still leads to their ultimate disposal, whilst 'reduction' simply means using the same approach, but using fewer resources or generating less pollution. A 'closed loop' approach, on the other hand, moves from acts of waste disposal, to ones where nature is mimicked (and see Benyus 2002). In this way, processes are re-designed in businesses and

schools which ensure that they produce as much or more energy than they consume (through, for instance, using solar panels), and create products that are not thrown away or down-cycled once their useful life is over, but enrich the soil or the air as they decompose. School leader could reframe many school building activities in this way.

Fourth, such refocusing illustrates the fact that such systems are not independent but interdependent. They are all parts of a larger system which depend upon each other. The crucial insight, then, is that humanity is dependent upon a healthy environment for its continued existence. It is such an insight which is currently almost totally lacking from mainstream economic thinking, and remains on the periphery of much mainstream societal thinking. Yet once fragility and interdependence are fully recognised, so is developed an understanding that the problems currently faced will be resolved only by cooperation at all levels of context – by those within schools and their community, by all parties at national level, and by international co-operation on their remediation. A change of focus at school level can and should parallel what needs to happen at the national and global levels.

Fifth, if governments have seemed largely happy to have educational leaders focus upon raising standards (largely for greater economic competitiveness), these refocusings return the leader to the beginning of this article, where Gunter & Ribbins (2002: 388) argued that we need to go back to first base, and ask questions such as:

- What should educational leaders be concerned with?
- What ideals should educational leaders be influencing their colleagues towards?
- How do local, national and global contexts affect this activity?

Conclusion: Refocusing on the Good Society and Well being

Such a refocusing of educational leaders visions ultimately entails participation in the debate about what constitutes a 'good society', and what counts as 'well-being'. Do these consist of ever more economic growth and consumption? Or do they entail a re-appraisal of the dominant social and economic paradigms of the developed world?

> Such reconsideration would ask whether different visions need to be focused upon, ones more concerned with a healthy environment where there is a more equitable distribution of resources now and in the future, which lead to more co-operative and interdependent societies, where notions of well- being are founded not only upon the possession of external goods, but also upon deeper understandings of the goods of spiritual growth. Embracing a sustained and informed education for sustainable development requires this kind of radical refocusing. It is a refocusing which returns to educational leadership a larger purpose and meaning than that currently assigned.

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