Knowledge and Creativity for a Sustainable World: the Universiti Sains Malaysia Approach

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Synopsis
Sustainability is a critical aim of Malaysian public policy and an important aim in education. Nonetheless, what sustainability means as it relates to education and the relationship between education and a sustainable future is unclear. In this paper I shall investigate the role that Universities in Malaysia play in shifting the practice and culture of innovation and creativity towards more sustainable values and outcomes. Sustainable education is based on ensuring that the capacities of students and the broader society are reengaged and empowered through connecting education to the needs and aspirations of civil society and moving away from neo-liberal ideas of education as a practice of consumption towards, sustainable values of advancing human dignity. Creativity and innovation within such an educational framework are goals and practices deeply connected and embedded within sustainable commitments to social justice and the public good, as well as individual growth and development, which provide a critical legitimizing principle for university research and teaching.

One of the key theoretical influences in making this argument is drawn from the arguments of Amartya Sen, whose theorization of capability may provide us with a way of thinking about social growth and development that is not possessively individualistic but rather socially concerned. I will discuss this in reference to the approach of University Sains Malaysia which provides an example of a public University seeking to engage sustainability and tie educational creativity and innovation back to the common good and a sustainable future. The philosophical aim of this paper is to show how universities can pursue creativity and innovation as socially useful practices for advancing humane and sustainable values throughout Malaysian society and avoid the fusion of creativity with possessive individualism, consumerization and social irresponsibility.

"To realise our national aspirations, a concerted effort is needed to increase our nation's competitiveness, productivity and innovativeness. Attributes such as desire for knowledge, innovative thinking, creativity and competitiveness must be imbued within our people. The inculcation of moral values, progressiveness and performance-based cultures must also be instilled if we are to nurture successful individuals of the highest quality. This will determine our success as a knowledge-based economy." (Badawi 2007)

Introduction

Contemporary Malaysian public policy in the realm of education involves the espousal of several critical binaries. One critical binary that is the subject of this paper is the binary between sustainability and creativity. The recent awarding of APEX status to the University Sains Malaysia was in part due to its articulation of an educational agenda that combined both a commitment to sustainability as well as a commitment to creativity(2008; Razak 2006; Salleh 2006; Zakri 2006). This project combines two central aims of Malaysian public policy in regards to national development and engaging the knowledge economy. Yet the apparent simplicity and clarity of the aims belies the complex social, economic, political and cultural analysis that informs the APEX agenda.

This paper seeks to look at the USM agenda concerning sustainability and creativity and contextualize it within broader debates over neo-liberalism, globalization and the aims of Malaysian Higher Education. If we take a close look at Malaysian public policy documents and the aims of Malaysian public policy, we can see the central defining concept of sustainability as well as engaging the knowledge economy as critical objectives of Malaysian public policy. The National Vision policy 2001-2010(Wee 2003) has the following basic aims in building a resilient nation:

• Promoting an equitable society;
• Sustaining high economic growth;
• Enhancing competitiveness;
• Developing a knowledge-based economy;
• Strengthening human resource development; and
• Pursuing environmentally sustainable development.

Sustainability and creativity for developing a knowledge-based economy are critical Malaysian public policy goals. The USM APEX agenda is thus a critical and important articulation of the broadly set aims that have informed Malaysian public

policy. These goals are deeply articulated in an array of public policy documents ranging from the Third Outline Perspective Plan (OPP3), 2001(2001) through to the Higher Education Strategic Action Plan (Badawi 2007; Education 2007). However, these goals must be understood as part of a broader agenda that critically includes equality as well as competitiveness and growth.

The commitment of the Malaysian government to espousing and engaging with social justice and equity in relationship to sustainability are critical examples of a collective communitarian value set that informs how Malaysian policy makers and many educators see the problems of development and in our case education(Salleh 2006). A strong tradition of social justice, nation building and national unity permeates Malaysian public policy documents. This commitment stems from two basic sources.

First, as argued above the cultural practices of a communitarian society which are distinct from the cultural values of liberal individualistic societies, and second, the objective economic and social space that Malaysia finds itself in concerning globalization and development. Malaysia, as Chandra Muzzafar argues, is largely communitarian (Muzzafer 2002). The importance of understanding and articulating how we can achieve sustainability and engender creativity in Malaysian Higher Education nonetheless needs articulation within a communitarian framework (Lichterman 1995). USM's APEX strategy is such an articulation. Dzulkifli Abdul Razak articulates the basic aim thus:

"USM will set its vision of a sustainable tomorrow while keenly promoting values such as equity, accessibility, availability, affordability and quality as the optimal endpoints. Concomitantly, USM will embrace the protection of the ecosystem, the conservation and restoration of resources as well as the development of human and intellectual capitals for this purpose. USM will position itself to facilitate in meeting existing (e.g., Millennium Development Goals) and other future global aspirations towards the upliftment of the billions trapped at the bottom of the socioeconomic pyramid"(2008).

The USM strategy is infused with ideas of 'team-effort' and 'working together'. These notions are not accidental but rather represent the value system of a communitarian culture quite at odds with possessive individualistic culture (2008) (Walzer 1990). A holistic approach of Malaysian public policy in general and USM's APEX strategy in particular, with respect to national goals, is a critical determinant of the

Malaysian approach. Norodin Soipee captures the values of Malaysia's approach to public policy in the following observation: "We share a culture which places the stress on working together. As you know, our culture says it's a wonderful thing not to stand out like a sore thumb. It's a wonderful thing to harmonise, pull together in the same direction."(Jacques 1995) This normative and communitarian culture finds expression in USM's commitment to sustainability and educational growth through innovation and creativity.

The correlation of sustainability with development of human capital and hence creativity is recognised clearly. Malaysian scholars such as Maria Salih, for example, point out that in relation to sustainability: "In this era of modernization and globalization, higher education has a responsibility to produce a human capital that are not only professionals of the future but also responsible citizens."(Salih 2006) The key points from the foregoing discussion to consider are that Malaysian public policy has a critical concern with sustainability and creativity in the context of communitarian values, and that the APEX project is a distinct Malaysian contribution to engaging sustainability and educational growth in the current context of globalization and represents an alternative to neo-liberal hegemony.

Resilient sustainability and creativity
While there is a strong commitment to sustainability and creativity within the Malaysian public policy framework, this commitment is articulated within a broader framework of resilience. Often ignored in polemics about sustainability, the concept of resilience is critical in understanding the forward looking nature of Malaysia's sustainability agenda. Resilience "emphasizes increasing our ability to withstand crises". In the Malaysian context, the national agenda aims to "shore up our national resilience, and enhance our competitiveness". Specifically, "Vision 2020, focuses on building a resilient and competitive nation."(2001)

Put simply, the Malaysian agenda seeks to mesh sustainability and creativity to produce and inculcate a resilient Malaysian nation, in keeping with its communitarian ethics and seeking ways to leverage competitive advantage in an asymmetrical hierarchical world global, economic and cultural order. This agenda critically informs the USM approach to both sustainability and pedagogical reform. The aim of USM is to produce resilient students who are morally informed, socially aware, creative, innovative and able to both stand up for their culture and values as well as engage the broader world. Consider for example the following quotation from the

Vice Chancellor of USM:

"A university worthy of its name should be engaged in protecting and defending as well as promoting humanity to higher ideals. We want our graduates to not only contribute to national and global developments but to become agents of change – in a sustainable way."(Razak 2006)

Continuing in the same vein the Vice Chancellor argues that students' involvement in tertiary education and campus life will not only prepare them as employees with good corporate responsibility but also will help them become responsible global citizens with strong national-local commitments(2008). The critical idea is that the products of USM are not simply committed to socially responsible values but also able to adapt to change. Hence, USM's APEX agenda is definitional as a capacity-building agenda. One way of providing deeper philosophical depth in articulating this project lies in grasping the USM agenda as an agenda of capacity building in the context of socially just goals. In some respects this approach echoes the kind of argument put forward by scholars such Amartya Sen, who have provided social philosophy with deep accounts of capability deprivation and social exclusion, which must be addressed if societies are to truly call themselves democratic and just.

Sen recognizes that educational social goods are culturally informed and that the realization of human capacities is a key issue in respect of sustainable development and educational growth (Sen 1999; Sen 2000; Sen 1977). A resilient and sustainable nation needs creative solutions to maintain and expand human capabilities and address social deprivation in the context of establishing a reinvigorated position of competitive advantage. However, the way competitive advantage is articulated is within a commitment to social justice, resilient sustainability and cultural dignity. This is an important distinction between the USM approach and more mainstream neo-liberal ideas of competition (Porter 1998). This sensibility argued by Sen is captured more practically in the direction of USM. Charles Hopkins writing for USM's Healthy Campus Series monographs writes:

"Higher education is an important factor in the nation's policy to deal with global changes. The acceleration of technological, economic and even social and cultural changes requires nurturing a society that can deal with these rapid changes. Citizens must develop the intellectual capability to accept or reject the myriad of changes brought on by media, the globalization of trade, coping with the results of

climate change, etc. From a development perspective, a knowledge-based society will be crucial for a nation to compete in the global competition for market share and locational advantages. Of decisive importance will be its ability to generate and apply locally relevant knowledge to address global concerns and issues."(Hopkins 2005)

The needs of a developing economy and its place in the global production of knowledge animate Malaysian policy. At the same time, commitment to communitarian and socially defensible values is also critical for Malaysian public policy. How this relates to the way creativity is pursued and articulated is of critical importance to understanding the relationship between creativity and the national goals of education. Hence, creativity and sustainability take on a particularly culturally nuanced expression, which needs to be unpacked in the Malaysian context. Simply put, sustainability is not simply about halting progress and creativity is not simply about self-expression or the pursuit of and personal profit or power. Capacity-building in the sense that Amartya Sen uses the term, and commitment to addressing disadvantage, critically animates the USM APEX strategy. Critical conclusions from the discussion above include recognizing that Malaysia is committed to principles of sustainability in fostering national development and that Malaysian public policy recognizes that its people need to engage the knowledge economy and engage the issue of creativity in its educational institutions. Finally, Malaysian policy makers are committed to pursuing these goals with a focus on resiliency by recognizing the specific cultural and social values that characterize Malaysia as well as the specific limitations and opportunities Malaysia has in the current global economic and socio-cultural order. USM's APEX strategy is a clear articulation of capacity building and creative adaptation to the problems of competitive advantage and moral and ecological crisis that characterise the contemporary world.

Critics of the sustainability and its relationship to creativity
Motives for creativity, according to Jerome Ravetz, have usually been related to ideas of pursuing knowledge for its own sake, obtaining power over things, people or nations, and profit. These kinds of institutionalized motivations characterize much knowledge production in the West. They cohere with the dominant values of possessive individualism (Bellah 1985; Macpherson 1962; Macpherson 1987) that characterize neo-liberal hegemony in the(Etzkowitz and Leydesdorff 2000; Etzkowitz and Zhou 2006) contemporary era. They are the critical kinds of motivations that characterize creative scientific advancement in much of what we refer

to as the modern world. Within the neo-liberal hegemony, such motivations appear natural: curiosity, power and profit.

Indeed, for defenders of neo-liberalism the connection of creativity to the 'dynamism' and 'progress' that characterizes consumer consciousness, competition and the profit motive is of central importance. Sustainability in such a paradigm is far less salient than exploiting the natural world and constant change. However, as I have argued above, Malaysian public policy and the specific leadership provided by USM has been historically animated by quite a different ethos (Education 2007; Ibrahim and Quek 2007; Lee 2004; Ongkili 1985; Segawa 2007). To understand what USM is striving for it is necessary to grasp philosophically what is opposing it.

To fully grasp the theoretical issues at stake, we must take a step back and engage the neo-liberal criticism of sustainability/creativity discourse; to understand how neo-liberalism curtails and inhibits a deeper understanding of the possibilities of alternative globalization. In other words, the problems facing USM and Malaysian development are not simply practical issues of asymmetric political economy and cultural disrespect (Phillipson 2009). The educational project of USM finds itself contending with a deep hegemonic notion of the basic possibilities of humankind, derived in large measure from the global authority and hegemony that neo-liberalism(Macpherson 1987) has over our concepts not simply of economics and culture but of basic psychological identity itself.

Creativity in neo-liberal theory is linked to individual inspiration, reward, and 'creative destruction', which lies at the root of capitalist development and growth. According to critics of sustainability, one of the key results of pursuing sustainability is a curtailment of creativity and innovation: a stymieing of progress (which is the driver of capitalist development) which leads to a curtailment of creativity. Simply put, the essential argument is that neo-liberal values are the drivers of creativity and that sustainability as a doctrine is at odds with creativity and progress. This fundamental argument has to be considered in debates over sustainability, creativity, and the relationship between pedagogy and normative values in a society. The following discussion shall investigate two popular articulations of neo-liberal ideology concerning creativity and sustainability and then proceed to engage the classical intellectual foundations behind these popularizations.

Two examples of this way of framing the relationship between sustainability and creativity are found in the work of Virginia Postrel in, "The Future ands it's

Enemies"(Postrel 1998) and Austin Williams in "The Enemies of Progress"(Williams 2008). Postrel and Williams provide us with a clear critique of sustainability and its presumed dragging effect on human creativity. First, according to Williams, "Sustainability is an insidiously dangerous concept at odds with progress"(Williams 2008) and "a pernicious and corrosive doctrine that has survived primarily because there seems to be no alternative to its canon."(Williams 2008)

Williams argues that creativity and innovation itself are stymied and deadened by the doctrine of sustainability. Sustainability according to this point of view is deadening enterprise and curtailing inspiration and ambition. According to Williams, "[w]hat does ambition mean if we allow humanity to be represented as the biggest problem on the planet, rather than as creators of a better future...? If our ambition is to put nature first, humans come second."(Williams 2008) For Williams sustainability is a doctrine of moribund and conservative anti development. It curtails creativity because it inhibits ambition and inspiration. Innovation and creativity are according to Williams linked to our personal ambition. Williams critique provides us with a clear and succinct elaboration of the neo-liberal assault on alternative globalization. Such is the way neo-liberal ethics connects to creativity and progress.

Postrel develops a similar thesis in "The Future ands its Enemies". She argues that there is a fundamental conflict between 'dynamism' and 'stasis'. Dynamists are characterized by their commitment to dynamic growth and change. Dynamic institutions, "let people develop, extend, and act on their particular knowledge without asking permission of a higher, but less informed, authority."(Postrel 1998) On the other hand, stasis institutions and ideologies are characterised by two basic trends. Firstly, by technocrats and technocratic ideology which is future oriented as long as they control it and secondly by reactionaries who "seek to reverse change, restoring the literal or imagined past and holding it in place."(Postrel 1998) Postrel's critique of what she refers to as stasis meshes with fears over sustainability. Articulating sustainability as a kind of authoritarian desire masked as ethical concern is a key critique for those who oppose both sustainability and seek to drive a wedge between it and innovation and creativity. Postrel and Williams and the school of thought they represent and articulate see sustainability and concerns over consumer culture as efforts to reintroduce stability, prediction and control to human life and thus curtail development and the spirit of progress. Postrel writes:

"In the end, the debate between dynamism and stasis is a dispute over how civilizations learn, and whether they should. It is a struggle between those who believe

they already know "the limit of human felicity," and those who trust the pursuit of happiness to go in many different, and many unexpected, directions. And it is a conflict between those who believe culture is too dangerous to be left alone and those who believe it is too precious to be controlled."(Postrel 1998)

Both Postrel and Williams' viewpoint resonates with the values of neo-liberal hegemony. The radically individualistic ethics of their positions and the way this is fused with expressive creativity and individual expression fails to account for the aspirations of those left behind. Their positions analyse what they see as the authoritarian pessimism of sustainability theory by performing an act of philosophical reductionism and articulating the choices we face within a simple binary that is both misleading and representative of the underpinning logic of neo-liberal possessive individualism. As Jim Dator points out in his critique of Postrel, "Postrel may find it difficult to grasp, one does not need to be either a reactionary or a technocrat to believe there may be more to life than being a consumer."(Dator 1998)

Standing behind this kind of critique of sustainability and its so-called authoritarian curtailment of growth, development and innovation lays the foundational works of Fredrick Hayek and Joseph Schumpeter. These thinkers provide a far more serious and challenging philosophical basis for the defence of neo-liberal hegemony. Hayek (whose work influences Postrel) argued that "the unavoidable imperfection of man's knowledge and the consequent need for a process by which knowledge is constantly communicated and acquired"(Hayek 1945) is a fundamental fact with regard to the nature of knowledge and our relationship to it. Hayek proposed a subjective theory of value and framed this within a commitment to methodological individualism. This approach to knowledge, its correlation with individualism as a primary value provides the philosophical basis through political economy for a radically individualistic and contingent theory of knowledge and its relationship to economic change.

The second theorist whose work is even more obviously at the root of neo-liberal theories of creativity and progress is Joseph Schumpeter. Schumpeter's work is usually cited more frequently with regard to creativity innovation and the market. According to Schumpeter, "The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers' goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates."(Schumpeter) According to Schumpeter, a process of incessant revolution within capitalism is a process of 'incessantly

destroying the old one, incessantly creating a new one.'(Schumpeter) What's more, "This process of Creative Destruction is the essential fact about capitalism. It is what capitalism consists in and what every capitalist concern has got to live in."(Schumpeter)

The key point here concerning innovation and creativity in the discussion above is firstly that it is explicitly linked to capitalism as an inherent cultural logic and secondly that it is of necessity 'creatively destructive', which is to say that it is counter to the maintenance of the status quo. As a final note a classic essay arguing precisely this point of view in more recent scholarship is by Buchanan and Vandberg who argue for a kind of conflation between the market and creativity in their essay titled, "The Market as a Creative Process"(Buchanan and Vanberg 1991). This article classically captures the essence of the neo-liberal conflation of the market and creativity. What then are the key characteristics of the neo-liberal position on sustainability and creativity? Firstly, creativity is formed through radical individual self expression and pursuit of power, profit and knowledge for its own sake. Secondly, sustainability is characterised as authoritarian, conservative and relentlessly inhibiting creativity. Sustainability and creativity are thus fundamentally in tension. Finally, creativity is based upon Cartesian certainty and the primacy of the individual over the social.

Critique: Breaking the Gordian knot

How then, do we engage the issue of creativity and sustainability when neo-liberal hegemony constructs the relationship in such pejorative, simplistic and self-serving terms? To answer this question we need to step back a little to our analysis of Hayek, Schumpeter, and their contribution to the neo-liberal concept of knowledge production as methodologically individualist, radically subjective and creatively destructive. Elias Khalil provides us with an important place to start in breaking down the problems of neo liberal knowledge theory. In his seminal essay, "Information Knowledge and the Close of Frederick Hayek's System" (Khalil 2002), Khalil points out that there is a fundamental problem with the neo-liberal project and articulated by Hayek. Khalil argues that the individualist achievements Hayek espouse rest on communal presuppositions, which are necessary for individual achievement to occur.

Seen from this neo-liberal perspective ideas of sustainability if caricatured as desires to seek certainty and maintain the status quo are fundamentally at odds with

how knowledge is actually created and processed. Liberal individualistic capacities of human beings are for Hayek established without recourse to their social communal, cultural and institutional basis which are themselves products of social purpose (Khalil 2002). This reification of the individual at the expense of sociality is the critical philosophical move of neo-liberal individualism and the foundation of its approach to creativity and its critique of sustainability.

In other words the radically individualist ideas of individual achievement and creativity that are espoused by Hayek and Schumpeter and the way realisation of these are articulated as untrammelled, limited or inhibited by social or communal values fundamentally misstates and the way cultural, institutional and communal values do in fact inform structure and generate the creative individual. There are plenty of examples of creativity occurring without having to express itself neo-liberally, as possessively individualistic or as profit and power driven. The pecuniary incentive is not a necessary or sufficient condition for creativity. If we accept the neo- liberal characterization of the relationship between creativity and individual expression and possessive individualism as well as the corollary with constant creative destructive change, then it is indeed hard to see how sustainability can cohere with creativity.

Indeed the ethics of a sustainable society committed to social values, intersubjective respect and recognition as well as cultural understanding run up hard against a philosophy of individualism, profit, personal power and self-expression at the expense of social responsibilities loyalties and shared values. How then do we break the Gordian knot created by neo-liberalism? This fundamental problem animates the strategic direction of USM's APEX strategy since it is fundamentally engaged in a program of sustainability and engaging and developing creativity and innovation. The key issue is the temperance of ambition by responsibility, profit by restraint and the rights of individual advancement by social duty.

Creativity is constructed and realized within certain organizational and cultural orders and constructs, schools universities, families, national and local cultures, etcetera. As agued above, creativity itself either can be representative of individualistic values or informed by social purpose. Pedagogical and research values within a University will have a significant effect on this issue. The structural order of contemporary globalization with its global market, and asymmetrical power relations acts as an inhibitor to some cultures, social orders and even nation states from competing fairly and equitably in the contemporary neo-liberal Washington

consensus model of globalization.

The critical point at issue with the APEX strategy is to establish a way of breaking down the presumed identity between neo-liberal values and creativity and the presumed identity between the psychology of possessive individualism, personal ambition, destruction and creativity. In other words, how does USM inculcate in its culture of creative excellence an ethics of sustainable responsibility? Challenges to USM's APEX program revolve around asymmetries in the global knowledge/power discourse as well as the problem of the free flow of information within globalization but the unequal recognition and respect of diverse, non-metropolitan and local knowledge. We also face the conundrum of how we perceive creativity and its relationship to social purpose and resilient sustainability.

Current globalization theory posits the free flow of information, shifting notions of spatiality and speed. There is in much globalization literature a kind of espousal of a 'weightless economy'. Yet we find that in fact that 'physical manifestations' of the apparently groundless globalized knowledge economy "tend to remain obstinately grounded."(Wild 2000) Neo-liberal theory also recognizes this phenomenon theorizing it within competitive advantage (Porter 1998; Sassen 1999). This grounded characteristic despite the appearance of free flow is based in part on historical asymmetries, which manifest in globalization between the centre and the periphery. These inequalities and asymmetries structure competitive advantage in the globalized knowledge economy.

Marginson refers to these asymmetries when he points out that, "Global flows of people, ideas, knowledge, messages, technologies and capital are uneven and only partly reciprocal"(Marginson 2007). Not only are the neo-liberal visions of the individual as consumer culturally specific and representative of particular historical and cultural traditions, but also even on its own terms, the promise of neo-liberal individualism and freedom run up against deep forms of exclusion and marginalization in the contemporary world. The program of APEX and its alternative globalization model is contending with these grounded and structural inequalities and exclusions.

USM's sustainability program is a direct engagement with the individualistic and universalizing theories of neo-liberal globalization, which is culturally tone deaf, and blind to world patterns of power, privilege, inclusion and exclusion interpolate global contemporary interactions. For example, global asymmetry between the

North and the South, in terms of economic and cultural power is well known. Evans argues that, even 'democratic social movements at a global level' 'replicate the same North-South asymmetries as the dominant regime'(Evans). Indeed asymmetry exists at several levels globally. So while we have, world-wide systems of communications, information, knowledge and culture, tending towards a single world community as Marshall McLuhan … predicted' (Marginson and Wende 2007), we also have asymmetrical relations of inclusion and exclusion which also map how globalization works.

These hierarchies, however, are not objective in the sense that they can be validated rationally in a fair open and cross-cultural inter-subjective manner. The hierarchies of knowledge are themselves practices of hegemony as understood by Gramsci. They exclude based on unequal power, implicit though rarely expressed prejudices and assumptions about value that are Eurocentric and exclusionary(Babic 2007; Burbules and Torres 2000; Guehenno 1999; Manicas 2007; Merrouche 2006; Phillipson 2009; Ritzer 2004; Sites 2000; Stiglitz 2005; Tomlinson 1997). However as argued above the critical issue at stake is the following: is there truly as socially just and equitable free flow of knowledge in conditions of globalization. What does this mean given our understanding of knowledge as culturally and informed and socially interactive? How can we theorize what creativity means and how it should be generated in such conditions?

The question that must be asked is this: To what extent is the knowledge of peripheral nations and peoples respected and seen as being of equal worth in current conditions of globalization? How does Malaysia obtain competitive advantage in Higher Education when it faces global asymmetry of economic power, cultural respect and social understanding? What do we do when the promise of globalization and radically individualistic culture is both exclusionary and unevenly distributed among the world's peoples?(Peters 2001). Compounding this is the fact that personal ambition (think of Gordon Gekko's Greed) and the individualist ethics that result from this and inform it liberal expressivist theories of creativity can in principle have "Trojan Horse"-like effects on developing nations(Bowers 2003; Bowers 2001; Bowers 2005).

Indeed, research into the nature of creativity and its philosophical foundations reveals two basic streams. Peters provides us with an excellent overview of two basic accounts of creativity. According to Peters, the first model of creativity is a 'highly individualistic', which posits Schumpeter's 'hero-entrepreneur' as its crowning

glory. The second model is 'relational and social' it rests on 'principles of distributed knowledge and collective intelligence'. This kind of model surfaces in related ideas of `social capital', [and] `situated learning'.'(Peters 2009)

These two models of creativity provide us with quite different ways to envision creativity and different ways to correlate creativity and innovation with broader cultural, social and economic theory. The first tradition coheres with the expressivist tradition and the romantic tradition of progressivism. It also finds itself easily meshed with the individualistic notions of neo liberalism. The second tradition is more socially oriented and finds support in the social constructivist tradition(Slezak 2000). USM's commitment to sustainable values, socially informed ethics and community values rests on engaging creativity relationally and socially. This approach has intellectual credence in the literature as outlined by Peters.

This binary within creativity discourse can be characterized as a tension between creativity, which is taught and engaged with in the classroom and elsewhere as individual self-expression, and creativity as involving as dialogical engagement with social values and concrete social problems. Recent scholarship on how creativity is articulated in diverse cultures and diverse disciplines and social relationships points to the need to engage a theory of creativity that is not simply a kind of reification of Western cultural practices(Sternberg and Grigorenko 2004).

For example, Swede (Swede 1993) argues that creativity is not simply a characteristic of a person (individualistic expressive creativity) but rather is a process (socially interactive dialogical). Such a rearticulation of creativity away from its presumed home as a characteristic of individuals and understood more by reference to the values and social processes within which it occurs is philosophically significant(Reid and Petocz 2004). One-way of simplifying the discussion above is to remind ourselves that 'creativity is not a stable idea but one that is constituted differently within different domains.'(Reid and Petocz 2004)

This rethinking of creativity as not simply a property of individuals but of social groups and their relations and problems enables us to understand the way institutions such as USM seek to reconnect creativity back to defensible and socially just values. Hence, this re-theorization of non-individually possessive pedagogy frames creativity in a more socially ensconced manner and provides the bridge between sustainability and creativity that is the critical issue for the USM APEX strategy. There is as well significant support for this approach, ranging from bodies such

as UNESCO through to critical creativity theorists, such as Kobus Neethling for example, who argues against twentieth century understandings of creativity rooted in neo-liberal self –centeredness and profit at the expense of environmental degradation, inequality and compassion (Neethling 2002). Finally, the cultural dimensions to creativity and the centrality of this to sustainability which is recognised by UNESCO among others points to the need to overcome an overly Eurocentric and individualistic concept of creativity if we are to move towards sustainability.

Creativity is a form of social practice. It involves social capital and draws on cultural traditions. Understood in this way creative practices within a university are forms of social interaction and expressions of cultural values. We need an approach to understanding educational creativity that draws upon and recognises cultural and social context on the other hand recognises economic
and structural change. How we view the practices of creativity are bound both by cultural and historical specifics and yet also by broader forces of social and economic change. Getting the balance right in how we view educational reform and how we place ourselves in relation to educational doctrines is the task. The USM APEX strategy is a complex effort at trying to 'get the balance right'.

Embedded within our current discourse are difficulties in how we understand knowledge in situations of rapid social economic and cultural change and transformation. The asymmetrical power relations that exist in contemporary globalization and the failure of asymmetrically powerful cultures to recognise and engage the knowledge and aspirations of marginal cultures, is compounded by the groundedness of privilege in the current world order. This puts a premium on universities such as USM engaging how they can ensure that their students in fact uphold the kinds of social values and essential principles that are characteristic of a just world and society.

Understanding how individualistic and expressivist pedagogy can inculcate possessively individualistic values in students (masked as pursuit of creative genius) and how in an unequal global order this can lead to a disempowerment and educational disadvantage is reasonably clear. Brain drain, the pursuit of profit for its own sake and cultural self-hatred can result from pedagogies that do not temper creativity and innovation with social values and commitments. The aims of Malaysian competitive advantage cannot be achieved when students see their own values as deficit against an individualistic consumerist culture that rewards excellence at the expense of community values, greed at the expense of social justice, and ambition

at the expense of social responsibility. By way of summation, the following can be claimed. First, teaching and engaging creativity and innovation can be addressed from two essential paradigms: the individualistic/romantic expressivist paradigm, which meshes easily into contemporary neo-liberalism, or a socially dialogical and reflexive paradigm that recognizes that creativity is a social product aimed at solving and engaging agreed upon social problems. Second, an individualistic society based on consumerism and ambition without temperance by social responsibility may reward 'creativity' without recourse to its social value. Finally, USM is committed to addressing real and lived issues that affect the Malaysian people. Its commitment to creativity and innovation must be understood within this framework.

Conclusion

Creativity (and scientific advancement in developing countries such as Malaysia) is dictated by a set of values that are relevant to Malaysia national aspirations, development and place in the global world order. Such an approach to Higher Education articulated by USM in its commitment to a Malaysian path is the critical distinction between this "Malaysian" way and the dominant neo-liberal agenda. This approach finds philosophical support in the arguments of philosophers such as Amartya Sen, who recognizes the culturally specific way that social goods must be articulated and the centrality of capacity building and recognition as a critical component of development in a sustainable and socially just fashion(Sen 1999). By way of concluding the essential points to grasp so far are that; the rearticulation of innovation and creativity serving the social aspirations of Malaysians is very different from ideas of creativity rooted in individualistic aspirations devoid of social responsibility and commitments. The aims of engaging Higher Education with creative sustainability and pedagogical change is directly related to the needs of Malaysian society.

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