HUMANIZING SYSTEMIC CHANGE: LEARNING, TECHNOLOGY AND DIVERSITY IN GLOBALIZED CRISIS

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Abstract

Our era sees its knowledge explosion enmeshed with technologies of breathtaking scale and the expansion of a system of globalized power. Initial promises made for the digital revolution - that technology would underpin a move towards more equal and democratic futures where human emancipation from burdens of menial labor and differentiated access was imminent – have proven premature, if not false. This paper examines processes and factors shaping globalized learning as it negotiates its way between technology and needs of the diverse individuals and communities who constitute this changing world. Globalization opens up real possibilities for transformative learning, where knowledge exponentially grows without constraints of national curricula or vested self-interest. The contradictory nature of globalization outlines the challenges for education and learning if sense is to be made of the emerging planetary social order. The nature of systemic crisis means that education systems will need to focus ever more intently on providing competence and skills to promote adaptability and creativity, thus turning crisis into a springboard for new directions. Education and learning structures will need increasingly to be shaped by values and vision as to the best way to secure human development in a way than enriches all stakeholders. The interaction between technology and globalization

creates new challenges but also new opportunities. The pervasive globalizing process means policy and strategy need to be linked to parallel international analysis on how new forms of cultural diversity impact on learning needs of populations subjected to unprecedented levels of change. The removal of barriers to participation and the enhancement of embedded equality approaches will, at the end of the day, be about asserting strategic policy vision.

Resumen

Nuestra era encara una explosión de conocimiento entrelazada con tecnologías a gran escala de expansión y de un sistema de poder globalizado. Las promesas iniciales hechas para la revolución digital, de que la tecnología apuntalaría un movimiento hacia un futuro más igualitario y democrático donde la emancipación humana de las cargas de trabajo de mano de obra y el acceso diferenciado eran inminentes, han demostrado ser prematuras, si no falsas. Este documento examina los procesos y factores que configuran el aprendizaje globalizado a medida que negocia su camino entre la tecnología y las necesidades de los diversos individuos y comunidades que constituyen este mundo cambiante. La globalización abre posibilidades reales para el aprendizaje transformador, donde el conocimiento crece exponencialmente sin restricciones de los planes de estudios nacionales o el interés personal. La naturaleza contradictoria de la globalización esboza los desafíos para la educación y el aprendizaje si se tiene que dar sentido al orden social planetario emergente. La naturaleza de la crisis sistémica significa que los sistemas educativos deberán centrarse cada vez más en proporcionar competencia y habilidades para promover la adaptabilidad y la creatividad, convirtiendo así la crisis en un trampolín para nuevas direcciones. Las estructuras de educación y aprendizaje tendrán que estar cada vez más conformadas por los valores y la visión de la mejor manera de asegurar el desarrollo humano de una manera que enriquezca a todos

los interesados. La interacción entre la tecnología y la globalización crea nuevos desafíos, pero también nuevas oportunidades. El proceso de globalización generalizado implica que la política y la estrategia deben vincularse al análisis internacional sobre cómo las nuevas formas de diversidad cultural impactan en las necesidades de aprendizaje de las poblaciones sometidas a niveles de cambio sin precedentes. La eliminación de las barreras a la participación y la mejora de los enfoques de igualdad se centrarán, al final del día, en ser acertados con una visión de la política estratégica.

Introduction

In the same way that the extraordinary expansion of knowledge and learning in the European Renaissance was intrinsically connected to geographic expansion and colonial conquest, so our era sees its knowledge explosion enmeshed with technologies of breathtaking scale and the expansion of a system of globalized power unparalleled in the human experience. No human agency is left untouched by the impact of unprecedented change. No subject area or mode of thought is unaffected by pervasive and systematic consolidation of intellectual, technological, political and conceptual hegemony. In addition, this ongoing process is both shaped and informed by an almost instantaneous communications system that can transmit information and awareness to any corner of the earth. In such a bewildering process of connected transformation and realignment, individuals and communities grapple with the seeming end of all certainty. The parallel brutalities and violence that often accompany these processes produce a series of connected challenges to traditional (and very hard won) achievements in our understanding of rights, participation, equality and meaningful inclusion.

Twin processes of degraded levels of participatory citizenship and ever diminishing access to resources and opportunities have actually

accelerated. By the early twenty-first century, we have reached a point where the contradictions and inequalities of the prevailing socio-economic order have been exacerbated by an attempted assault on reason itself, scientific method and the conceptualization of inalienable rights that have (at least formally) dominated discourse since the Enlightenment. The risks of increased immiseration for the majority of the world's population, return to reactionary totalitarian political systems, and concentration of wealth, resources and power in ever smaller circles are tangible. This negates initial promises made by and for the digital revolution - that technology would underpin a move towards more equal and democratic futures where human emancipation from burdens of menial labor and differentiated access was imminent.

The reality has turned out to be very different than boosters of techno-social governance and the 'end of history' predicted. All this reflects and conditions a transformed world in which technology and values intersect powerfully and symbiotically. In the tsunami of technological advance however, it is critical to remember that social structures continue to play a powerful role in ordering relationships and methods of power transmission between both individuals and groups. People and systems use technologies, not the other way around. This poses significant challenges for social systems to ensure that primary human values around rights, respect and recognition are both maintained and qualitatively enhanced through purposeful human appropriation of technologies to serve meaningful and transformative ends. This paper examines processes and factors shaping globalized learning as it negotiates its way between technology and needs of the diverse individuals and communities who constitute this changing world.

Dimensions of Globalized Learning

Globalization has become one of the most used terms today when describing economic, social and commercial trends. Such a transformation, in such a relatively short time, poses huge challenges for traditional structures and institutions. People now have the means to compare and contrast issues, to debate and assess situations and to have access to diverse approaches and standards instantaneously. The impact for educators is immense. Such an environment masks real difficulties for large sections of the world's population. Such technological resources are not available to all. Research demonstrates that poverty levels, hunger and marginalization in the world's developing countries are actually increasing. Embedded and systemic violence frequently accompanies these disparities. This means that access to communications and technology – like access to wealth – can be highly unequal.

Globalization has the potential to increase differences in terms of finance and power. Globalization has been cited as a process that drives down wages and degrades the quality of working conditions. Jobs and processing can be switched with extraordinary speed from one region to another with little concern for local communities or their needs. Finally, globalization has been regarded by many as a process of cultural and social homogenization, where alternative views or dissenting viewpoints are sidelined by the pre-eminence of the market and its seemingly endless cycles of consumerism, consumption and intellectual sterility. Universities and education systems now have to exist and survive in this environment.

The impact on education and learning of globalization processes is equally contradictory. On the one hand, learning resources (such as course materials, MOOCs, accepted terminology, subject range and internet-based learning) have been criticized for being

overwhelmingly centered on US or European models and norms – and, in particular, by being dominated by exclusively English language orientations. On the other, globalization opens up real possibilities for transformative learning, where knowledge exponentially grows without constraints of national curricula or vested self-interest.

In this environment, the *Sustainable Development Goals*, set by the global community of the United Nations as critical targets for 2030, describe a course of action where education is directly linked to priorities to end poverty, protect the planet and ensure prosperity for all. These goals are intended as a shared vision of humanity, providing the missing piece of the globalization puzzle, the glue that can counter the centrifugal forces in an age of accelerated disruptive change. Educators have the power to ensure that the underlying principles of the *Sustainable Development Goals* can become a new and real social contract with citizens. The impact of quality approaches stimulated by international partnerships and engagement or standards frameworks like the PISA initiative of the OECD, give practical frameworks to achieving these global learning goals.

The consequences for education and learning are critical in this context. Cohen and Kennedy (2000) cited six issues around globalization that impact directly on education:

- Changing concepts of space and time
- An increasing number of cultural interactions
- Common problems facing the world's inhabitants
- Growing interconnections and interdependence
- Networks of increasingly powerful transnational actors and organization
- Synchronization of all dimensions involved in globalization.

A key issue connecting these dimensions is economics. The

interdependence of education (and associated schooling systems) and prevailing systems of economic organization has long been acknowledged. In an age of globalization, however, the connection is immediate, apparent and dominant. Certain forms of education have been identified as ultimately surviving or failing based on their economic rationality rather than technological development or learner relevance. This has been particularly identified in relation to distance learning.

The pioneering work of Rumble (1997) and Hulsmann (2000) showed that the future of distance education and e-learning, for example, would be decided by economic factors. Their focus was not so much on the objective question around *what* benefits and costs of learning methodologies, but *whose* benefits and costs. For both writers, educational methodologies in a globalized age will be decided by both governments and policy makers as well as potential students deciding whether particular learning methodologies are a 'sound investment'.

Goran Therbörn (2000) has looked at this from the sociological perspective that analyzes the impact of globalization on the nature, purpose and structure of education in a rapidly evolving world society. He locates changes in higher education under five topical discourses:

- Competition
- Economics
- Socio-critical discourse
- State power (or impotence)
- Cultural and planetary ecology.

Therbörn graphically links globalization to a ruthless system of *'winners'* and *'losers'* and sees this divide having an increasing

importance for how we structure and appreciate the importance of learning and education. The winners are those for whom an opened world is an opportunity for action, connection to resourceful friends, improved mobility (geographic and social), access to information and enriched access. For losers, globalization is a closure of opportunities, employment options, chances for decent wages or profits and a cultural invasion that subverts important values.

This stark presentation of the contradictory nature of globalization outlines the challenges for education and learning if sense is to be made of the emerging planetary social order. Old certainties are certainly displaced by a discourse that is ambivalent, amorphous and linked as directly to the ownership of educational institutions as to the subject matter that has traditionally been taught there, 'neutral' and 'value free'. Globalization has become an element in the commodification of knowledge. Knowledge in this sense becomes just another item to be sold and traded.

In addition, traditional economic systems and market driven learning policies have undergone a fundamental challenge in terms of relevance and ability to meet the needs of individuals and communities alike. The generalized crisis since September 2008 has placed a new focus on the innovation imperative. It also raises the agenda of using innovation and creativity to meet human and social needs and not merely to enhance profitability of transnational economic sectors whose prime rationale is increased profitability. (Blass and Hayward, 2014)

From the outset, universities have been characterized by partnerships between various interests and agencies. In this, there is nothing new. Universities have served rich and complex roles not simply in generating and directing research, particularly research that feeds into social and economic policy. Universities and other research

and learning agencies (public, private and philanthropic) populate a rich landscape of ideas, investigation and teaching profoundly affected by external change and technological transformation. The need for enhanced quality (not least because of what can only be termed as competitive processes at work between educational institutions) has become critical. Quality and standards themselves rely on structured linkage which situate learning and its outputs in a matrix of socially desirable outcomes and outputs.

Globalization gives a special flavor to this strategy. Universities and other Higher Education Institutions now find themselves subject to huge competitive pressures in everything from comparative league tables to outsourcing, institutional amalgamation and rationalization. The spread of the knowledge economy has been paralleled by significantly increased student and faculty mobility.

In this scenario, knowledge-based societies have to overcome a number of barriers, challenges and tensions that may prevent horizontal focus on a common good being achieved. This shift to less hierarchical notions of knowledge production has been underpinned by new social model thinking. This highlights the need to understand local contradictions and promote values of interaction, dialogue and reciprocity. At the center of this shift has been the aim to overcome borders, whether disciplinary, geographic, institutional or cultural.

In this context, we can evaluate the importance and centrality of global learning. Academics and educators are now, whether consciously aware or not, intimately connected to the need to articulate and demonstrate globalized learning models and reflective practice founded on explicitly international perspectives.

Understanding Crisis and Opportunity in Learning

All societies are experiencing unprecedented rates of change. In Europe, this rate of change has had a particular dynamic – reflecting the pressures of globalization within a context of an ambitious social and political experiment of increased integration – the European Union. As a direct result of the development of a free labor market in the European Union, greater numbers of Europeans can move between different countries to find new jobs or better standards of living. This has taken on an added impetus with the single largest expansion of the EU in 2004, when ten new Member States were admitted. This massive movement of peoples, communities and labor skills within the EU means that contact with new and different cultures is happening at an increasing pace. The rate of immigration into the EU has also strongly increased during the last 20 years. This builds on earlier population movements following the Second World War that saw the exponential growth of the 'guest worker' system.

All European countries have seen the impact of this change or are in the middle of addressing the policy, social and economic issues that arise from it. These changes produce many benefits but they also have created a number of challenges and difficulties. Differing customs and habits may cause confusion. Conflict may arise from misunderstanding. Uncertainty is increasing in new and more competitive environments. Unfamiliarity can produce stress and miscommunication for both host and immigrant communities. The severe current economic crisis and deterioration produced unprecedented difficulties for meaningful integration strategies and policies. The rise of xenophobia and anti-immigrant social and political movements has fueled a negative narrative that can actually threaten the basis of the EU itself.

In the mid-1980s, Lyotard (1984: cited in Roberts 1998) wrote that

'the status of knowledge is altered as societies enter what is known as the post-industrial age and cultures enter what is known as the post-modern age'. The old notion that knowledge and pedagogy are inextricably linked has been replaced by a new view of knowledge as a *commodity*. According to the OECD (1996) 'knowledge is now recognized as the driver of productivity and economic growth, leading to a new focus on the role of information, technology and learning in economic performance. The term "*knowledge-based economy*" stems from this fuller recognition of the place of knowledge and technology in modern … economies'.

Several writers have extended the concept, arguing that science and research are transforming the whole social structure, creating a knowledge-based society of global proportions. Etzkowitz (2001) provided the concept of the 'triple helix'. This represents the complex interplay between universities, government and industry in the innovation framework (Etzkowitz & Leydesdorff, 2001).

There is clearly a reciprocal relationship between the massive and unprecedented expansion of education during the second half of the 20th century and global economic restructuring based on the advent of post-industrial or 'knowledge' society. In post-industrial society, knowledge supersedes agriculture and manufacturing as the main means for wealth production, and becomes the primary resource of society. It is not that agriculture and manufacturing disappear, but rather that technology has made both agriculture and manufacturing so efficient that they demand the attention of only a minority of the workforce (Perkin 1991). However, it is wise to remember that post-industrial, knowledge-based society is not a phenomenon that has suddenly been sprung on the world with the advent of the new millennium.

The American sociologist Daniel Bell coined the term

post-industrial society as far back as 1962. He predicted the replacement of factory workers by 'knowledge workers' as the primary producers of wealth. Since these early speculations, the knowledge economy has indeed become a global reality. And, on a global scale, wealth and prosperity have become more dependent on access to knowledge than access to natural resources. As the knowledge society continues to develop, market relations based on knowledge production permeate all aspects of society. Also, the commodification of knowledge impacts heavily on the internal social structure of the scientific community. The continuing importance and centrality of the university is questioned as knowledge is brought more within market and political exchanges. This has important implications for the structure of educational delivery.

Knight (1999) divides modern international higher education into four approaches:

- The activity approach (involving discrete activities)
- The competency approach (which stresses 'the development of skills, knowledge, attitudes and values')
- The ethos approach (emphasizing 'a campus culture that fosters internationalization')
- The process approach ('the integration of an international dimension into teaching, research and service').

To this list, one could add the business approach (which emphasizes the maximization of profit from international student fees) and the market approach (with its stress on competition, market domination and deregulation). In a profoundly unequal world, where divergences in wealth and power are increasing between the North and South, education and learning are not immune from in-built structural inequalities. If learning is about access to knowledge, one has to consider the implications of denial of such access to a significant

proportion of the world's population. Even within countries this differential access has been identified – often referred to as a *digital divide*.

Altbach (2002) recognizes inequalities in internationalization of higher education:

A few countries dominate global scientific systems. The new technologies are owned primarily by multinational corporations or academic institutions in the major Western industrialized nations, and the domination of English creates advantages for the countries that use English as the medium of instruction and research. All this means that the developing countries find themselves dependent on the major academic superpowers.

Despite dramatic growth in student numbers, many commentators argue that the full potential of international educational cooperation and the free flow of ideas is not being fully realized. More could be done to promote the free flow of scientific information and research findings, and to assist developing nations through fellowships and grants. The needs of the least developed countries, many of them small, are serious and the prospects for substantial change in these countries, at least in the short term, are limited unless the more developed countries are able to increase their technical assistance and other aid.

The contradictions and challenges of a globalized world have produced significant challenges. The systemic socio-economic crisis since the Great Recession of 2008 has escalated many elements to levels of severe threat however. It has become clear that underlying issues indicate the probability of cyclical instability for the future. The nature of systemic crisis means that education systems will need to focus ever more intently in providing competence and

skills to promote adaptability and creativity in turning crisis into a springboard for new directions. It poses a challenge to ensure that the advanced technologies and systems available to modern societies are used not to turn learning into a mere commodity but to allow it to become a critical tool for reflection and social renewal. This means a new emphasis on innovation, research and creativity. It will also mean a recognition that education cannot be contained within a pre-determined time span but must, on the contrary, occur over one's entire life. This will mean that education and learning structures themselves will need increasingly to be shaped by values and vision as to the best way to secure human development in a way than enriches all stakeholders.

Technology: *Solution or prison?*

Each historical era creates a system of education designed to address its needs. In the 19th century, the educational revolution in Europe and the United States was driven by a radical shift from agriculture or small-scale production to manufacturing and massively complex industrial organization. Mass industrialization linked, in turn, to rapid urbanization and social mobility in industrializing countries. In these processes, traditional social systems (the home, the workplace, community life, and the church) lost many of their earlier functions in the educational system. Informal or semiformal learning systems (apprenticeships, guilds, trades, etc.) gave way to the standardized schools. The school became a central institution in education, to the extent that we now often think that education equals schooling.

Today, the knowledge society transformation is once again changing the system of education. To understand these changes and their implications, it is important to understand the fundamental needs that education addresses in society. The Industrial Age

was characterized by the exceptionally prominent role that formal schooling played in education. As the industrial modes of production, organization, and value creation decline in importance, formal education will play a less important role in the future. Education, itself, becomes a future-oriented activity that prepares the educated for an unpredictable world. Education becomes as much a preparation for uncertainty and coping with the unpredictable – a mode of responding – as much, if not more than learning static facts and information.

Each transformation (from pre-Industrial Age to the Industrial Age, from Industrial to Post Industrial) creates a radically new articulation of the prevailing educational system. The current transformation is creating just such a new articulation. The transformation towards the Knowledge Society is, however, even more revolutionary. It is linked to a set of processes and elements that are, for the first time in human history, explicitly and consciously global. At present, we are not only changing the aims and objectives tasks of the prevailing educational system, but also the division of labor between the different components of the educational system. This entails a parallel process of changing learning itself. Cultural transfer through education is a critical means to generate the stability required by the continuation of social life. Cultural transmission, however, is not only a means. School, obviously, is only one element in this cultural transfer – and a rather superficial one, as Dewey noted. Much of this cultural transfer occurs elsewhere.

The other key function of education is diametrically opposite to its integrating and stabilizing function: societies can continue to exist only because they adapt and change. For this they need variety, incremental innovation, and reconfiguration. Complete integration of aims, beliefs, aspirations, and knowledge would be fatal to human creativity but also to what is valued as the democratic process.

Education is therefore also needed to generate and facilitate social change and innovation.

The interaction between technology and globalization has created new challenges but also new opportunities. Digitalization is connecting people, cities, countries and continents in ways that vastly increase both individual and collective potential. These same forces and trends also have the potential to make the world volatile, complex and uncertain. At its core, digitalization is a democratizing force. It is now possible to connect and collaborate with anyone. But digitalization also has the ability to concentrate extraordinary power. Digitalization can make the smallest voice heard everywhere but can also quash individuality and cultural uniqueness. Digitalization can be incredibly empowering: the most influential companies that have been created over the past decade all started out with an idea, and they had the product before they had the financial resources and physical infrastructure for delivering that product. But digitalization can also be disempowering, when people abandon their freedom for individual responsibility and critical thought in exchange for convenience and become reliant on the advice and decisions of computers.

For education, this has the added dimension of challenging traditional roles, power systems and functions of the Academy and removing the sacrosanct elitism inherent in such restricted systems. Universities have provided critical space to challenge the external environment. At almost every level, however, western universities did not support the transformative socio-political upheavals of the 1960s. Universities also lost large parts of the digital race, ceding ground to exponentially innovative and expanding high tech companies. Lacking critical insight or technological relevance, many universities fell into serving mainly national roles and functions. This pattern has been further hampered by the massive student hunger

for new horizons and thinking, international focus and engagement and the ability to move seamlessly across boundaries both real and imagined.

This process has promoted a significant re-evaluation of the role and purpose of education and the most appropriate delivery methodologies to ensure optimum learner engagement. Education, as both process and outcome, while linked to schooling systems, is now seen as very different from schooling in structure and intent. This point was made most forcefully by Ivan Illich writing in the 1970s (*De-schooling Society*). Technologies of learning permit the delivery of knowledge, skills and attitudes in many new and innovative ways.

As education systems and schooling structures reflect the societies and cultures of which they are a part, they also reflect society's values and priorities. Traditional learning in Europe, for example, emerged in contexts of hierarchical social stratification. Class structures and ownership of wealth meant that access to knowledge was tailored to suit privileges of castes and professions that maintained profoundly non-egalitarian systems. Wealthy or aristocratic families could purchase their own teaching resources (personal tutors). Apprenticeship learning was confined to master-pupil relationships governed through powerful guilds with restricted access.

Even in such contexts, learning technologies were important. The most common device was literacy itself. The development of written records and the ability to read vastly increased the ability of learners. Memorization, music and even stained glass all could – and did – play parts in educating people.

The emergence of standardized and systematic methods of instruction took on a radically new dimension with the Industrial Revolution. It marked the growing synchronization of teaching

methodologies and the requirements for improved work performance and productivity. The knowledge explosion and information revolution of our own times is still deeply marked by the experiences, needs, structures and expectations of industrialization and its aftermath. Whatever about particular technologies or new methods, the characteristics of human learning remain driven by issues around motivation, skill acquisition, improved understanding and tangible benefit. They also relate critically to power and ability to control one's own environment, needs, expectations, relationships and rewards.

The impact of a globalized work environment and the end of classical hierarchical schooling models has massive implications. The evidence is that learning will ever more be conditioned by an intersection of interests between the world of employment and the world of education. Educational institutions (and learners as individuals) must respond to the paradigm shifts affecting all life and relationships in the 21st century. A recurring theme that has been identified here is the '*productivity of knowledge'*.

This productivity of knowledge can be exemplified by indicators that include:

- Communicating the same knowledge to ever larger numbers of learners
- Increased enabling of learners to apply knowledge in their organizations
- Generating additional knowledge through pen and distance learning programs
- Transforming the traditional lecturer into a mentor, guide and

facilitator of learning who supports learners at the same time as increasing their knowledge
- Enabling a profound increase in acquisition and generation of new knowledge.

Advanced technologies enable open and distance learning to be a powerful tool in advancing learner competence. These technologies suggest forms of delivery and assessment and research which are at first unfamiliar but, on investigation, indicate extraordinarily rich paths to improve learning and the acquisition of knowledge (Conole, 2013).

At present open and distance learning is still a somewhat marginal method – confined largely to areas where access to conventional education is problematic or where students are geographically dispersed. The key characteristics for the success of such technologies can be viewed within the evaluative framework outlined by McManus and Lyne (1992):

- Accessibility
- Availability throughout a lifespan
- Responsiveness to individual life circumstances
- Ability to cope with learner diversity
- Affordability
- Demonstrable effectiveness.

Learning technologies, however they develop in future years, will still operate within this framework.

Diversity: Frontiers of Human Meaning

The concept of diversity includes a number of practical issues to remove attitudinal barriers as well as a set of values based on

acceptance and respect. It suggests a level of understanding that each individual is unique, while recognizing individual differences. These differences can be along any number of dimensions: 'race', ethnicity, gender, sexual orientation, socioeconomic status, age, physical abilities, religious beliefs, political orientation, skin color or ideologies. A systematic approach to diversity entails the exploration of these differences in a safe, positive, and fostering environment. It is about understanding the Other and moving beyond simple tolerance to embracing and celebrating the rich dimensions of diverse difference contained within each individual or group.

Diversity management is a set of conscious practices and skills that involve understanding and appreciating interdependence of people, cultures, and the natural environment, practicing mutual respect for qualities and experiences, and understanding that diversity includes not only ways of being but also ways of knowing. The social reality is that personal, cultural, and institutionalized discrimination has historically created and sustained privileges for some while creating and sustaining disadvantages for others. Diversity management is about learning to live and work with difference but also to create learning around the barriers caused by prejudice so that we can facilitate eradication of all forms of discrimination.

Workplace diversity refers to the variety of differences between people in an organization – this encompasses race, gender, ethnic group, age, personality, cognitive style, tenure, organizational function, education, background, and more. Diversity involves not only how people perceive themselves but also how they perceive others. Those perceptions affect their interactions. For a wide and diverse range of employees to function effectively as an organization, human resource professionals need to deal effectively with issues such as communication, adaptability, and change. Diversity management is a process intended to create and maintain

a positive work environment where the similarities and differences of individuals are valued, so that all can reach their potential and maximize their contributions within an organization's strategic goals and objectives.

Modern European societies are experiencing unprecedented rates of change at all levels. These changes are seen in a number of ways and in a variety of contexts. The rate of immigration into the EU has strongly increased during the last 20 years. As a direct result of the development of a free labor market in the European Union, greater numbers of Europeans can move between different countries to find new jobs or better standards of living. This massive movement of peoples, communities and labor skills within the EU means that contact with new and different cultures is happening at an increasing pace. In addition, the impact of the wars and killing fields in the Middle East and Africa since the US led Iraqi invasion of 2003 has produced a huge increase in refugees and asylum seekers. The recognition of permanent difference and dislocation in the European metropolitan regions is a difficult and complex process.

In a similar manner, the changing nature of families, the embedded discrimination against women, the exclusion of citizens with disabilities the emergence of new forms of overt fascism and discrimination all point to the need to re-define and assert the importance of social inclusion and varied diversity as foundations of democracy itself. All countries have seen the impact of this change or are in the middle of addressing the policy, social and economic issues that arise from it. The severe current economic crisis and deterioration has produced unprecedented difficulties for meaningful integration strategies and policies. The nature and scale of this has a direct impact on learning for those working in the creative learning and education sectors. In addition to new challenges in equality

related employment issues, old issues have re-asserted themselves in new - and sometimes menacing - ways.

These encompass:

- Ethnic demographics
- Ongoing discrimination regarding disability
- National frameworks and policies
- Socio-cultural structures and norms
- Flexibility and adaptability
- Problem identification and resolution
- Educational systems and the ownership of learning
- Best employment practice.

The need to develop relevant and practical techniques and methods and learning frameworks for learners and practitioners at the interface of cultural, ethnic, economic, social and religious difference is a key driver for innovative diversity competence development. The development of skills, knowledge, behaviors and attitudes to cope with and derive mutual benefit from a time of crisis and diversity is critical for modern European employment systems.

The globalization process is at the core of labor market change in all countries. This has specific implications for learning specialists and educators in terms of professional training, best practice and standards in approaching the diversity emerging within many communities. The pervasive globalizing process means no discussion on policy or strategy can be undertaken without parallel international understanding and analysis of how new forms of cultural diversity impact on the learning needs of populations subjected to unprecedented levels of change.

From Margin to Empowerment: Inclusive Futures

Parallel to school divisions and stratification were similar systems in the world of work. Schooling structures were linked more and more explicitly to these school systems during the age of industrialization (Braverman, 1974). Hierarchies of knowledge transfer are seen in the division of work. This hierarchy can be conceptualized as a type of pyramid. At the peak of the pyramid is the owner-stakeholder (or entrepreneur, engineer or designer) who originates an idea or technique that can then be implemented by taking advantage of economies of scale (Miller et al, 2008). The concept of the independent 'genius' who creates new ideas or techniques and the technocrat who ensures they are implemented by 'front-line' workers maintains, legitimates and reproduces an inherently unequal distribution of the capability to produce, know, learn and derive shared benefit from the ideas/techniques. The education and training of workers, given their subsidiary function, only develops to the most basic level required to satisfy production needs. Veblen powerfully conceptualized the impact of fragmented knowledge and skill acquisition for craft workmanship resulting from industrialization as long ago as 1914 (Veblen, 2006).

As in the case of the printing press, today it is the Internet which is the contemporary technological tool that makes possible management of information and knowledge in quantities hitherto incomprehensible - and in real time. In this respect, it permits access to seemingly limitless amounts of information. This is subject to access and digital literacy which itself can be mediated by pre-existing power

and access structures. The Internet has a demonstrated intentionality that continues to guide the action of its creators.

Making a retrospective, summarized interpretation we can observe that, as Castells (2001) states:

1. The Internet is the combination of an unprecedented linked network of big science, military research and the culture of freedom (in the European liberal sense of defence of individual freedom against any kind of external limitation), born outside specific company parameters and on which scientists and researchers collaborated intensively.
2. Its creators deliberately worked on a precise computer architecture evolving towards an open, decentralized, distributed and multidirectional computer-based communication system capable of encompassing the entire world (and with an inherent sense of possibly changing it).
3. Internet genesis and development is a cultural practice regulated by the cultural values of individuals (and even hackers) who network with open, free software distribution rules. The protocols on the basis of which they work are themselves susceptible to modification.
4. Institutions managing the Internet must constitute themselves according to the principles of transparency and cooperation inherent within their stated philosophy and practice to function effectively.

This suggests a new development of cultural guidelines, themselves potentially based on cooperation, reciprocity in knowledge distribution modalities and increased boundary crossing through horizontal networking between people from different contexts or practices. This is the foundational perspective of global learning, where crossing boundaries and re-imagining knowledge itself on a

global scale replaces traditional restrictions on imagination, be they geographic or cultural.

The centrality of the concept of *lifelong learning* to new initiatives in Europe requires attention. Its role and function reflect the Commission's concerns that Europe needs to display a constant emphasis on best practice if it is to keep up with the needs of all its citizens in a time of change. The nature of lifelong learning is responsiveness to the needs of the learner.

Throughout all Member States of the EU - and indeed in countries all around the world - there is growing concern about the capacity of traditional education systems to change, adapt and provide an appropriate foundation for lifelong learning. It has become urgent for governments to review the ways in which schools are organized, the content of curricula, modes of delivery, design and location of places of learning and the integration of advanced information technologies into the overall educational structure. In such an environment, it is important to evaluate and re-assess the role and function of schools in our society and the relationship between education and families, employment, business, enterprise, culture and community.

The removal of barriers to participation and the enhancement of embedded equality approaches will, at the end of the day, be about asserting strategic policy vision. Vision about what society means, and about what it is for, can inform the creative process of training and skill development activity. It can give a sense of value and direction to the design and development of employment structures. A lack of vision about the meaning of work means that we could be forever condemned to repeat past mistakes.

This also speaks of the critical importance of innovation and vision in addressing the key priorities for developing learning and

transnationality to combat socio-economic marginalization. It is of interest that marginalized groups can often be the springboards for new innovative learning methodologies.

Developing innovative and creative learning and application paradigms is critical for several reasons. This develops the discourse by a focus on several connected themes:

- Intercultural communications
- Learning policy in contexts of diversity and change
- Conflict transformation initiatives
- Human rights frameworks for educational access
- Innovation in work and labor market transformation around diversity
- Hegelian conceptualizations of the Other
- Transformational learning in social change
- Permanent migration – developing multicultural responses
- From digital divide to universal access – Universal Design for Learning
- Implications for policy, research and innovation
- Elephants in the room - war, violence and the costs of exclusion.

It takes time to develop indigenous voices that respond to indigenous needs but yet have international resonance and validity. It takes time and resources to develop capacity – and often even a terminology - which speaks to the immediate and local. If this is done well it can and will enter the marketplace of original ideas. Otherwise there is a danger that models, and discourse will endlessly be but a copy of a copy.

Overcoming exclusion and marginalization means equipping students and educational stakeholders alike not simply with the

mechanisms to understand social challenges but to be able to do something about them. Social exclusion implies both a *structure* and a *process* in the ordering of human relations.

Inclusion is about ensuring that alternative aspects of the human experience are fostered and vindicated. This in itself calls for communities of the marginalized to better define their needs and their potential contribution to the wider society and communities of which they are part. Inclusion is a critical component of global learning, ensuring that the world passed on to subsequent generations is not a uniform, suburbanized market place but a living and diverse collection of richly different communities. Inclusion and diversity are integral elements of values in teaching, research and best practice in global learning.

Conclusions

Education has become a networked web of public, private and social factors responding to an ever-increasing set of change factors. In addition to changing conceptions of education held by international governments, educational institutions act and behave like actors on a crowded stage searching for scarce resources among many other competing interests. In this context, if none other, education now faces the importance of the critical role of partnerships, linkage and strategic joint ventures to achieve shared goals in a transformed external environment.

Globalization gives a new and enhanced importance to this process of educational change. Such a shift raises questions regarding structures of learning, working and production and how they might promote innovation and creativity. From being an aspiration to add interest to academic inquiry and student development, global learning has evolved to be a critical tool in preparing individuals

and societies to understand, engage with and potentially transform a globalized socio-economic environment.

Competition amongst nations for the control and productive use of knowledge is increasing. The power to shape and influence the direction of internationalization in higher education clearly rests with the larger and more powerful institutions and systems of the advanced countries. These countries do not present a united front; they compete amongst themselves for foreign students, control of knowledge and influence in the international higher education arena. Developing countries are not powerless in this relationship, but the balance is tipped towards the more advanced industrialized nations.

At their most basic, learning technologies focus on the tools, methods, techniques and operational modalities that envelop the learning and didactic process. Over the past few decades a complete revolution has occurred regarding not only our approach to the understanding of educational theories but also in our ability to use new and innovative methods to design and deliver learning.

One of the central questions informing the emerging dimensions of innovative learning in international contexts is how we work with the needs of specific communities to create a new matrix of opportunities for inclusion, mutual benefit and intercultural encounter.

The changes produced in both the human and technical aspects of the globalization process shape how global education may now include various learning communities previously excluded by reason of prejudice, discrimination or remoteness. We need to support learners across the globe to transcend barriers and address conflict and persistent discrimination by means of skillful application of potent technological tools in the metamorphosis of traditional

educational systems to meet unprecedented levels of socio-economic transformation.

Educators are challenged to examine rights-based approaches to inclusion, valued diversity and innovative models of equity in a globalized planet. In that direction, the potential of emancipatory learning can be recognized and the re-appropriation of human rights in the learning paradigm be asserted.

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