HUMAN RESOURCES AND THEIR DEVELOPMENT

Michael J. Marquardt
George Washington University, USA

Viwe Mtshontshi
Institute for Partnerships between Education and Business, South Africa

Keywords: Human resources, learning, education, workplace, planning, globalization, human potential, poverty, training, human resource development, sustainable development, strategies

Contents

Summary

Human Resource Development (HRD) is concerned with the learning and enhancement of individuals, of groups, of organizations, of communities, of nations, and, ultimately, of the entire world. In developing humans worldwide, one includes economic, political, social, environmental, cultural as well as spiritual development.

The aim of this volume is to guide the reader through the key elements and potential impacts of HRD on the development of human resources (DHR). The first topic, *Essential Elements of HRD*, looks at how sociological, political, environmental, economic and cultural issues impact on the enrichment of humans. Topic 2, *Essential Strategies for Human Resource Development*, discusses how strategic HRD planning is necessary to develop human potential worldwide. The design, delivery and resource necessary to implement successful HRD programs are explored. The third topic presented in this volume looks at how *human life systems, diversity, equity and spirituality* are important for the understanding and developing communities worldwide. Topic four, *Human Development and Global Change*, examines how human

development caused global changes in aspects of population, economics, finance, and technology. Topic five presents the countervailing perspective; i.e., how *global changes impact human development*.

1. Introduction - Humans, the Invaluable, But Often-Neglected Resource

We as humans are an invaluable, but often-neglected resource. The human resources of a nation are usually determined by the state of its development. In this Theme, human development resources are examined from the perspective of "ends" or the product of development, as contrasted with the "means" of development. Other facets of development in which humans play an important part, such as Natural Resources, Capital Resources, Technology, Information and Systems Management Resources; Institutional and Infrastructure Resources; and Sustainable Development Processes and Perspectives, are presented under other Sub areas/Themes of EOLSS On-Line.

Human Development can be measured in terms of a number of indices including health, education, food and nutrition, consumption patterns, income, employment, poverty, population, environment trends, and social and political fabric. These subjects are examined under other Themes in this Sub area. In this theme, we consider topics such as the sociological, political and economic issues of human resource development, strategies and resources for developing human resources, diversity, workplace learning, human life systems, leadership, and consequences of global change on the development of human resources.

Humanity stands at a defining moment in history. We are confronted with a perpetuation of disparities between and within nations, a worsening of poverty, hunger, ill health and illiteracy, and the continuing deterioration of the ecosystems on which we depend for our well-being. Despite significant progress in parts of the world, notably East Asia and China, the overall development picture over the decade is not a pretty one. We limped into the new millennium with over 1.2 billion people in extreme poverty, over 100 million kids not in school and nearly one in every three countries in the world poorer than they were at the beginning of the previous decade.

Thomas Gladwin describes the cycle of human-caused unsustainability, beginning with threatened biology (e.g., stratospheric ozone depletion, global climate disruption, global nitrogen overload, accumulating nuclear waste, freshwater ecosystem decline, global deforestation, and wetland/coral reef loss). The cycle continues by the swelling of the human population (3.5 billion more by 2050 that includes rising international migration, shortage of family planning, and rapid, unplanned urbanization). Persistent deprivation exists that includes 850 million adults illiterate, 2.7 billion who lack basic sanitation, 1.4 billion in poverty, and 840 million malnourished. The resulting social disintegration has left 1.2 billion people in the world un/underemployed, a widening rich-poor gap, enduring political repression, mounting family breakdown, and inequity-based conflict. A decline in renewable resources, greater freshwater scarcity, soil erosion/degradation, and spreading desertification complete the picture of neglected human resources and a future that cannot sustain itself unless we break the cycle. And the key cycle-breaker is Human Resource Development.

Human conditions will worsen on a worldwide basis unless development occurs. If the above trends go uncorrected, they will develop into increased exposure to external risks of all kinds, including economic disruption, forced migrations, ethnic strife, cross-border health crises, famine, fundamentalism, regional conflicts over resource use, weakened states and eco-terrorism.

A prime goal in developing humans worldwide is to eliminate the persistence of poverty. Poverty is such an important social and economic issue because it deprives people of choices and significantly reduces the level of well being, limits participation in political and development processes, and is associated with unemployment, underproductivity, poor health, nutrition, housing, and personal security.

2. Evolving importance of Human Resource Development

Without the development of human resources in societies around the world, the continued degradation of natural resources will occur, as more humans are not offered the resources and skills necessary for them to become productive constituents and contributors to world progress.

Drucker has observed that changes in market dynamics, technology and the structure of labor has created work that is more complex, abstract, and knowledge-based; increasing number of jobs require higher levels of reading, mathematics, problem solving, interpersonal and other workplace skills. However, most of the world suffers from lack of these skills that are needed for social and economic development. Human Resource Development is the engine that can provide the necessary competencies to develop teamwork, problem and process analysis, communication and other needed capabilities.

As a result, at no time in history has HRD been more critical in solving critical economic and social problems faced by communities, organizations and nations. A growing number of organizations now look to HRD for help in developing the capacity to compete in a global economy. HRD can act as a mediator mechanism where value and goal conflicts between work systems and sustainable human development needs are negotiated and resolved (Bates).

Diverse communities and organizations need individuals capable of operating effectively in diverse cultural environments, using increasing complex organizational structures and communications patterns, and managing change using multiple integrative business strategies with an embedded global perspective. Sustainable development is possible only when human beings who are properly educated and trained. Thus, HRD has become a major component of sustainable development.

HRD can serve both an *economic-oriented* role and a *people-centered* role; *Economically*, HRD can be a crucial tool for building and maintaining the reservoir of skills needed for economic and social development. Singapore, Korea, China, Ghana, and Chile provide examples where HRD has been a key part of the national strategy to foster sustainable economic development.

In the *people-centered* role, HRD can become the primary tool to more directly address the needs of the poor by building their potential for political and development participation, self-help, and improvement. Enhancing this potential is fundamental to the effective use of human and non-human resources and the sustainability of economic and social development processes.

3. Origin and History - Learning Across the Ages

The development of humans is traced to the very origins of learning and education. Depending on the era and historical period, learning has always been part of people's means of improving lives and manipulating the environment. Thus, Human Resource Development (HRD), which focuses on learning and training, and the Development of Human Resources (DHR), which focuses on the economic, social and cultural growth of people, should not be seen as separate processes.

Historically, families depended on mastering hunting and gathering skills for food, shelter and protection from elements. People learned that they could control the environment by making tools. "For the first time, people began to rely on tools and each other to meet their needs. Indeed humanity's progress through the ages has been inextricably linked to the development of practical tools and securing the bonds of mutual cooperation necessary for survival. With the development of tools and bonds of mutual cooperation came a new form of education - one characterized by *conscious* imitation rather than the *unconscious* imitation" (Torraco). In time, theories were developed and infused in the process of training.

The Greeks and Romans were pioneers in establishing the ideas and institutions for conscious development. Noted among the Greek Philosophers were Socrates (469-399 BCE), Plato (428-348 BCE), and Aristotle (384-322 BCE). The formal schooling as established by the Greek and Roman still exists today. The notion of liberal arts as known today originated with Plato. Greeks saw education as an opportunity to develop the individual. Their curriculum touched on all aspects of life—the supernatural, man and nature. The other dimensions of education were moral and aesthetic education.

The Romans took education further by integrating learning into normal life. Their education goals were to achieve long-term social, economic and cultural change. Romans were noted for being more practical. It was the role of a Roman father to impart skills and trades in his offspring. During the decline of the Roman Empire the early Christian Church provided education. The purposes of education were of spiritual value and love for labor. Christian influences shaped the curriculum for secondary and higher education for the medieval period and beyond.

During the later part of the Middle Ages, merchant and crafts guilds were established. Craftsmen and artisans got together to perfect their skills and protect their trades by setting standards and pay. One of the non-schools that was the most persistent for a long time was apprenticeship. There were three stages in the process: apprentice, journeyman and master. The length of the stages depended on the skill to be mastered. An apprentice learned under the master for no pay, then graduated to the next stage as a journeyman

where they were paid as day laborer. When journeymen had learned enough they were ready to set their shops and take on apprentices.

A revival of classical learning occurred during the Renaissance. Printing and the use of vernacular in learning and the invention of printing made it possible for most people who could not learn before to be able to. Amongst the influential figures that had a significant contribution to education during the Renaissance period were Martin Luther, Jean Jacques Rousseau, and Pestalozzi. Their theories were used as a base for most of modern theories.

The Industrial era of the eighteenth and nineteenth centuries focused on providing the necessary skills for employees to do the repetitive, monotonous work of interacting with machines. Twentieth century Human Resource Development began recognizing the importance of the human aspects of learning, the importance of teamwork and leadership, and the growing influence of technology and globalization.

The global concern for the development of human resources (DHR) including social and economic development had its first major impetus at the end of World War II. Several major events laid the groundwork. First, the 1944 meetings at Bretton Woods led a year later to the establishment of the International Bank for Reconstruction and Development (IBRD) and the International Monetary Fund (IMF). IBRD was to provide loans to the developing world as well as to help rebuild Europe and Japan and the IMF was to regulate currencies, stabilize exchange rates, bolster government finances and provide for free flowing trade.

The next major event was the forming of the United Nations in 1944. A number of institutions intended to support development were soon created. The UN Institute of Training (UNITAR), UN Educational, Scientific and Cultural Organization (UNESCO), UN Industrial Development Organization (UNIDO). The World Health Organization (WHO), the United Nations Development Program (UNDP), and the Food and Agriculture Organization (FAO) were formed earlier in the century to give support and a voice to the low-economic countries.

In 1947, the United States established the Marshall Plan for the stabilization of Europe. Development success in Europe and Japan spawned other arrangements and added more UN agencies. Soon a complex array of hundreds of bilateral and multilateral government agencies and thousands of private and non-governmental organizations (NGOs) were created to actively support development in some form or another.

Successful efforts in Europe and Japan were based on development theory that looked toward industrial growth, trade, and technological innovation sustained by successful broad scale planning that dictated the nature of development for the next twenty years. Early on, development was the province of engineers (of various kinds) and of economists (of various ideologies). While the work of the engineers had a narrow focus and funding, the economists were more theoretical, had objectives that were contested, and used methods that obliged manipulations of communities and governments (Saunier, 1999).

However, the successes in Europe and Japan were not easily replicated in the developing world which lacked organization and required different (and unknown) prescriptions to respond both to the realities of the place and to needs totally unlike those of post-war Europe and Japan. Control was impossible. Land tenure, was, and in many parts of the world remains, a tortured maze. Education levels were lower, and each local and distinct culture held different views on what was, and was not, important. East vs. West siphoned off resources and what remained went to bolster allies with no thought of how corrupt they may have been. An elemental distrust from South to North and North to South became a continual element at the forums of modern multilateral institutions.

In the late 1960's and 1970's, development models changed again. According to Saunier, "nearly a dozen theories guided development: basic needs, alternative technologies, institutional development, grass roots, marginalization, dependency, debt restructuring, and concerns for such social obligations as education (minimal and ephemeral), were all emphasized at one time or another." But they always looked at increased production and growth.

Then, in the 1980's sustainable development appeared and, while growth remained an imperative in the minds of many on the development side, none of them would admit to proposing anything unsustainable or unnecessary. By 1996, the UNDP and others had become a full and valued member of the sustainable development community.

Conferences that influenced thinking in the development institutions include the 1974 Bucharest Population Conference, the 1974 Cocoyoc, Mexico Symposium; two Habitat Conferences (1976 in Vancouver, Canada and 1996 in Istanbul, Turkey); the 1994 Cairo Conferences on Population and Development; and other sectoral congresses in forestry, fisheries, health, food production, etc. Saunier notes that the fourth UN World Conference on Women held in Beijing, China in 1995, may have been one of the most important because of the growing awareness of the importance of women in development as executing agent, catalyst, and object of development concern.

4. Today's Context for the Development of Human Resources

The development of human resources in the twenty-first century takes place in a world dominated by eight significant forces: 1) globalization, 2) technology, 3) radical restructuring and re-engineering of the world of work, 4) increased customer power and demands, 5) emergence of the knowledge and learning as the organization's must valuable assets, 6) changing roles and expectations of workers, 7) biotechnology, and 8) ever more rapid change and chaos.

4.1 Globalization and the Global Economy

Globalization has caused and was caused by a converging of economic and social forces, of interests and commitments, of values and tastes, of challenges and opportunities. Four main forces have quickly brought us to this global age - technology, travel, trade, and television. These four T's have laid the groundwork for a more collective experience for people everywhere. More and more of us share common tastes in foods (hamburgers,

pizza, tacos), fashion (denim jeans) and fun (Disney, rock music, television). Nearly two billion passengers fly the world's airways each year. People are watching the same movies, reading the same magazines, and dancing the same dances from Boston to Bangkok to Buenos Aires.

Ever more of us speak a common language. English is now spoken by more than 1 billion people in over 100 countries where it is either the first or second language. The English language which, like all languages, carries culture and social values is the global language of media, computers, and business.

The global economy has, in turn, resulted in the creation of global organizations, companies that operate as if the entire world were a single entity. These entities are fully integrated so that all their activities link, leverage and compete on a worldwide scale. They emphasize global operations over national or multinational operations. They use global sourcing of human resources, capital, technology, facilities, resources and raw materials. They deem cultural sensitivity to employees, customers, and patterns as critical to the success of the organization. Globalization of an organization occurs when the organization has developed a global corporate culture, strategy, and structure, as well as global operations and global people

Although certain industries globalized earlier than others (especially telecommunication, electronics and computers, finance and banking, transportation, automotive, pharmaceutical, petroleum, and biotechnology), every industry now has global players. Success depends upon the ability of the organization to compete globally for every industry and sector throughout the world. Even the largest companies in the biggest markets are not able to survive based on their domestic markets alone.

4.2 Computer Technology

We now live in an age of ubiquitous computers, the Internet, and technology-driven environments, a world where virtual reality and interactive multimedia technologies will be commonplace. Alvin Toffler writes how the advanced global economy and workplace cannot run for thirty seconds without the technology of computers. Yet, today's best computers and CAD/CAM systems will be "stone-age" primitive within a few years.

Already we have technologies such as optoelectronics, DVDs (digital videodiscs), information highways, LANs (local area networks) and WANs (wide area networks), groupware, virtual reality and electronic classrooms. Personalized intelligent agents will soon be available as built-in, on-line experts looking over one's shoulders. Artificial intelligence technologies (expert/knowledge-based systems, speech and natural language understanding user interfaces, sensory perception, and knowledge-based simulation) will be commonly available. Intelligent tutoring systems will be used to allow learner-based, self-paced instruction. Personalized digitized assistants, telecommunications and network advances, groupware, desktop video-conferencing and collaborative software/group systems technology will be widely prevalent in the next five years.

In addition, an array of technological developments have recently emerged for use in the home as well as the office including:

- Integration of television, telecommunications and computers through digitization and compression techniques
- Reduced costs and more flexible use and application of telecommunications through developments such as ISDN, fiber optics, and cellular radio
- Miniaturization (tiny cameras, microphones, small, high-resolution display screens)
- Increased portability, through use of radio communications and miniaturization
- Expanded processing power, through new micro-chip development and advanced software
- More powerful and user-friendly command and software tools, making it much easier for users to create and communicate their own materials (Bates, 1995)

The commoditization of ultra-high technology opens spellbinding opportunities for new knowledge-exchange products. British Telecom, for example, believes that future generations of portable phones could be installed right in your ear. While talking, the user could also glimpse images or data that are pulled invisibly off the Internet and projected onto a magnifying mirror positioned beside one eye.

The technology of the future will respond to our voices and extend our senses. It will stimulate complex phenomena—weather patterns, stock market crashes, environmental hazards—solving problems and predicting outcomes at a price anyone can afford. Computers, or networks of them, will become ubiquitous as they are invisibly imbedded in other things. These machines will reconfigure themselves when new applications are required. A whole new metaphor for computing is taking shape, patterned on the natural resilience and elegance of biological organisms. They will learn to diagnose, repair and even replicate themselves

Technology will increasingly require that managers manage knowledge rather than manage people. Organizations will become more virtual rather than physical because of technology. People will be more linked to customers in Kuala Lumpur than to co-workers across the hall because of technology. Technology will alter the "how" and "why" workers learn. Employees will need to train themselves. Workplace learning will no longer be in a fixed time and location with a group of people for just-in-case purposes; instead, it will be implemented on a 'just what's needed', 'just-in-time', and 'just where it's needed' basis. The technological forces that have already restructured work will force those who are responsible for Human Resource Development to "create ever more flexible and responsive learning and performance solutions"

-
-
-

Bibliography

(Sources listed in text that are not cited below are in the EOLSS Volume on **Developing Human Resources**)

Arnold, M. and Day, R. (1998). *The next bottom line: Making sustainable development tangible*. Washington, D.C. World Resources Institute. [How businesses can practice sustainable development]

Drucker, P. (1995) *The new society of organizations*. Harvard Business Review. [Rise of knowledge workers and knowledge organizations]

Fox, M. (1995) *The reinvention of work: A new vision of livelihood for out time New Yor*k: Harper Collins. [How work can become more meaningful]

Giddens, A and Pierson, C (1998). *Conversations with Anthony Giddens. Making sense of modernity*. Stanford University Press, California. [This book provides a modern sociological perspectives with a special emphasis on globalization]

Gladwin, T. (13 December 1999) "A call for sustainable development." *Financial Times*.[How sustainable development can be achieved]

Hofstede, G (2001). *Culture's Consequences : Comparing Values, Behaviors, Institutions, and Organizations across Nations*. San Francisco: Sage. [Impact of culture on how groups of people think and act]

Kelleher, A. & Klein, L. (1999). *Global Perspectives. A Handbook for Understanding Global Issues*. Prentice Hall, Upper Saddle River, New Jersey. [This handbook gives a very good overview of the issues in globalization]

Kotter, J. (1996). *Leading Change*. Cambridge: Harvard Business School Press. [Steps on how to change communities and organizations]

Marquardt, M. & Kearsley, G. (1998). *Technology-based learning*. Boca Raton, FL: St. Lucie Press. [Ways in which technology can be used to develop learning opportunities]

Marquardt, M. & Berger, N. (2001) *Global leaders for the 21st century*. Albany, NY: SUNY Press. [Biographies of 12 top leaders around the world]

Marquardt, M. (Ed.) (2001) *Developing human resources in the global economy.* San Francisco: Berrett-Koehler. [Essays on Human Resource Development in various countries]

Saunier, R. (1999). *Perceptions of sustainability: A framework for the 21st century*. Washington, D.C. CICI. [Provides overview of history of sustainable development]

Spears, L (ed.) (1995). *Reflections on leadership*. New York: Wiley. [Various authors discuss "servant-leadership"])

Tapscott, D. (1995). *The digital economy*. New York: McGraw-Hill. [Impact of technology on everyday life]

Shaw, H. W. & Craig R.L. (1994). *The Coming of Age of Workplace Learning: A Time Line.* Training and Development. [Summary of the history of learning in the workplace]

Stewart, T. (1997). *Intellectual Capital.* New York: Doubleday. [Importance of knowledge management and how to create it]

Wheatley, M. (1992). *Leadership and the new science*. San Francisco: Berrett-Koehler. [Leadership and quantum physics])

Zuboff, S. (1988) *In the age of the smart machine: The future of work and power.* New York: Basic Books. [How learning and work have become integrated]

Biographical Sketches

Dr. Michael Marquardt is a Professor of Human Resource Development and Program Director of Overseas Programs at George Washington University. He also serves as President of Global Learning Associates, a premier consulting firm assisting corporations around the world to become successful global learning organizations. He has held a number of senior management, training and marketing positions with organizations such as Grolier, World Center for Development and Training, Association Management Inc., Overseas Education Fund, Trade Tec, and U.S. Office of Personnel Management. Dr. Marquardt has trained more than 45,000 managers in nearly 100 countries and since beginning his international experience in Spain in 1969 and Mike is the author of 14 books and over 50 professional articles in the fields of leadership, learning, globalization and organizational change including **Building the Learning Organization** (selected as Book of the Year by the Academy of HRD), **The Global Advantage, Action Learning in Action, Global Leaders for the 21st Century, Global Human Resource Development**, **Technology-Based Learning**, and **Global Teams**. He has been a keynote speaker at international conferences in Australia, Japan, England, Philippines, Malaysia, South Africa, Sweden, Singapore, and India as well as throughout North America.

Viwe Mtshontshi is a Human Resource Development graduate student at George Washington University. Before she began her studies in Fall 2000, she was a founding member and Project Manager at the Institute for Partnerships between Education and Business (IPEB), at the University of Natal in South Africa. She has consulted in a number of education and business partnership projects in South Africa with organizations such as Toyota Teach Project, Eskom Community Development, Standard Bank, and First National Bank.

Viwe is the author and co-author of a number of articles including **Corporate Citizenship and Whole School Development, Focusing on quality: A partnership to enhance teaching and learning in business and education,** and **Training in South Africa**. She has presented South African Education and Business Partnership Projects in Botswana, Canada, England, and the United States.