

**Increasing Human Progress through  
Education : Need for a Quantum Leap  
in Education Policy**

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# Increasing Human Progress through Education : Need for a Quantum Leap in Education Policy

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In a remarkable book entitled “Investing in People” by Nobel Prize winning agricultural economist Theodore Schultz wrote some 30 years ago,

*“The decisive factors of production in improving the welfare of people are not space, energy, and cropland; the decisive factors are the improvement in population in quality (Schultz, 1981).*

Similar sentiments were echoed by Ralph Waldo Emerson, an American poet about a century ago in the following lines

*“Not gold but only men can make a people great and strong...”*

In recent times, the South African and world dignitary Nelson Mandela said, *“Education is the most powerful weapon which you can use to change the world”*.

These messages are prophetic and come from an economist, a poet, and a statesman and leader. The message is the same: the quality of people is a key resource for any nation to progress and achieve happiness, blessings, economic growth, social justice, and a stable society. Two special examples of people quality can be gleaned from the freedom struggle of two countries of India and South Africa. Both countries had a colonial past, a large base of people living in poverty, a culture of democracy and tolerance. Both countries are relatively new in the sense that they got their independence not long ago. South Africa attained freedom in 1991 and India in 1947. Although histories of freedom struggle of both countries are

different, the quality of leadership that they produced is exemplary. Mahatama Gandhi and Nelson Mandela are two icons of and role models for humanity today; the two leaders set the standards for democracy. The root of all human progress is thus the quality of people who can endure and make sacrifices for a better tomorrow, who can resolve conflicts amicably so as to live in peace in future; who can negotiate differences and find a win-win solution; who can work hard and learn to enjoy and be happy; who can dream and labour to achieve the dream; and, finally who can recognize the past and live the present to build a better future.

The quality of human beings or population of a nation can be measured by a number of ways. Various attempts have been made to measure the quality of mass population. For example, the most commonly agreed measure is the Human Development Index (HDI) which combines measures of life expectancy, education, and standard of living measured by the per capita Gross Domestic Product (GDP)<sup>1</sup>. The World Bank now computes these indexes for most of the countries of the world. The HDI has now become an important indicator of quality of life or people. The HDI actually replaced the Physical Quality of Life Index (PQLI) which was developed by sociologist Morris David in 1970s based on literacy, infant mortality, and life expectancy (Mosses, 1980). Liveability is another concept useful to describe the population quality. Two widely known measures of liveability are the Economist Intelligence Unit (EIU) and Mercer's Quality of Living Reports. These reports compute the liveability of countries and cities in the world based on the combination of subjective life satisfaction surveys and objective determinants of quality of life much as divorce rates, safety, infrastructure and so on.

The healthcare industry has also come up with a number of such indexes and their main intent is to quantify the physical and emotional well-being of the individuals. For example, the Popsickle Index (PI) was proposed by Catherine Austin Fitts (no date). This index measures the feeling of safety of children in the neighbourhood. It is computed as percentage of people in a community that believe that their child can safely leave home, walk to the nearest possible location to bring a popsicle and walk back to his/her home. However, all these indexes capture some specific aspects of quality of population and they are not all-encompassing.

Human progress is thus directly dependent upon the quality of people a society produces. The quality of people to a great extent depends upon the education they have. Education alone is not good enough and other cultural endowments are equally important determinant. The major objective of this book is to look at the human progress in a broader sense and relate it to the development of education as a key policy instrument to improve the quality of society. In section 2, a model of human progress is developed; the key sources of human progress are identified and discussed here briefly. In section 3, the role of education in underpinning the growth of human progress is sketched out. The conclusions and policy implications are discussed at the end in section 4.

### Sources of Growth of Human Progress

Human progress has taken place at an accelerated rate if we examine the transformation from Stone Age to Planetary phase of human civilization. The human history so far can be divided into four era: (1) Stone age (2) Early Civilization, (3) Modern era, (4) Planetary phase (Raskin et al, 2002). A comparison between the Eras is done in Table 1.

Table 1: Characteristics of Historical Eras of the World

Eras	Particulars			
	Time taken (years)	Organization type	Economy type	Communication method
Stone Age	100,000	Tribe/Village	Hunting and gathering	Language
Early Civilization	10,000	City-State Kingdom	Settled agriculture	Writing
Modern Era	1000	Nation-State	Industrial System	Printing
Planetary Phase	100*	Global Governance	Globalization	Investment

\*Estimation

Source: Raskin et al. (2002, pp. 3-5)

From Stone Age to Early Civilization age took about 100,000 years. Human society during this period changed from hunting-gathering to settled agriculture. These civilizations exhibited all classical characteristics such as being a city-state, having a government, existence of religion, social distinction, and artistic expressions. The Early Civilization lasted for some 10,000 years and Modern era began about a millennium ago. Experts now believe that we are now in the planetary phase of civilization characterized by movement away from independent, disconnected nation states to a global worldwide institutions. The advancement of knowledge has been the major driving force in this whole transition process from Stone Age to the planetary phase (Raskin et al, 2002). The advancement of knowledge can be attributed to two important constituents: cultural capital and human capital. However, there are other sources of growth of human progress which include moral, social, elders' capital as well. The role of each capital towards engendering human progress is delineated below in brief.

### ***Role of Cultural Capital***

There exist several definitions of culture as all definitions focus on some aspects of it. In a broadest sense, culture is a cultivated behaviour; that is totality of person's learned, accumulated experience which is socially transmitted, or more briefly, behaviour through social programming (Hofstede, 1991)<sup>2</sup>. Culture is manifested at different level in different ways. The famous model of Hofstede is commonly accepted. I would like to call it Onion Model (Figure 1) (Hofstede 1991). The Onion Model presents cultural manifestation and composition of culture through four types of layers. The innermost deeper layer represents values; this is the core of a culture and refers to broad tendencies for preferences of certain state of affairs to others (good-evil, right-wrong, natural-unnatural, and so on). The second deepest layer is of rituals which are collective activities of the group of people (these may include religion and social ceremonies, ways of greetings etc). The third layer consists of heroes who are prized persons in the group, these persons can be real or fictitious from past or present/future. The heroes represent the values and characters that are worthy of following in the cultural group. The last and fourth layer represents symbols which can be words, gestures, pictures or objects with particular meaning. Cultural knowledge of a society is a kind of seed knowledge. The child learn this knowledge from the family first and then from the society as he/she grows up. In this manner, cultural knowledge is transferred from one to

the next generation. The three cultural capitals which help boost the frontier of human progress in the society are: (1) the cultural of work (C1), (2) culture of family (C2), and (3) culture of human values (C3). The total cultural capital is hence the sum of the three individual capitals ( $C=C1+C2+C3$ ).

The culture of family (C1) is an age old tradition of all cultures around the world. Two basic ingredients of family living are sharing/sacrifice and respect for all members in order to achieve the collective family welfare. The child learns these intangible qualities through osmosis through family interactions. Up until 20<sup>th</sup> century, family was large, including husband, wife, parents-in-laws, and other members such as brothers and sisters of husband or wife and children of all. It was an extended family system. In 20<sup>th</sup> century and beyond, the trend of extended families began to wane and was replaced by nuclear families including husband, wife and children only. The concept of sharing thus redefined and has a limited appeal and emphasis is more on individualism, and less on collective welfare. Individualism promotes less tolerance and drive for personal success is enhanced. The values that children pick up during their growing years guide them throughout their lives when they enter into civic life in society. Family values thus become an important resource in producing a citizenry that a progressive nation needs.

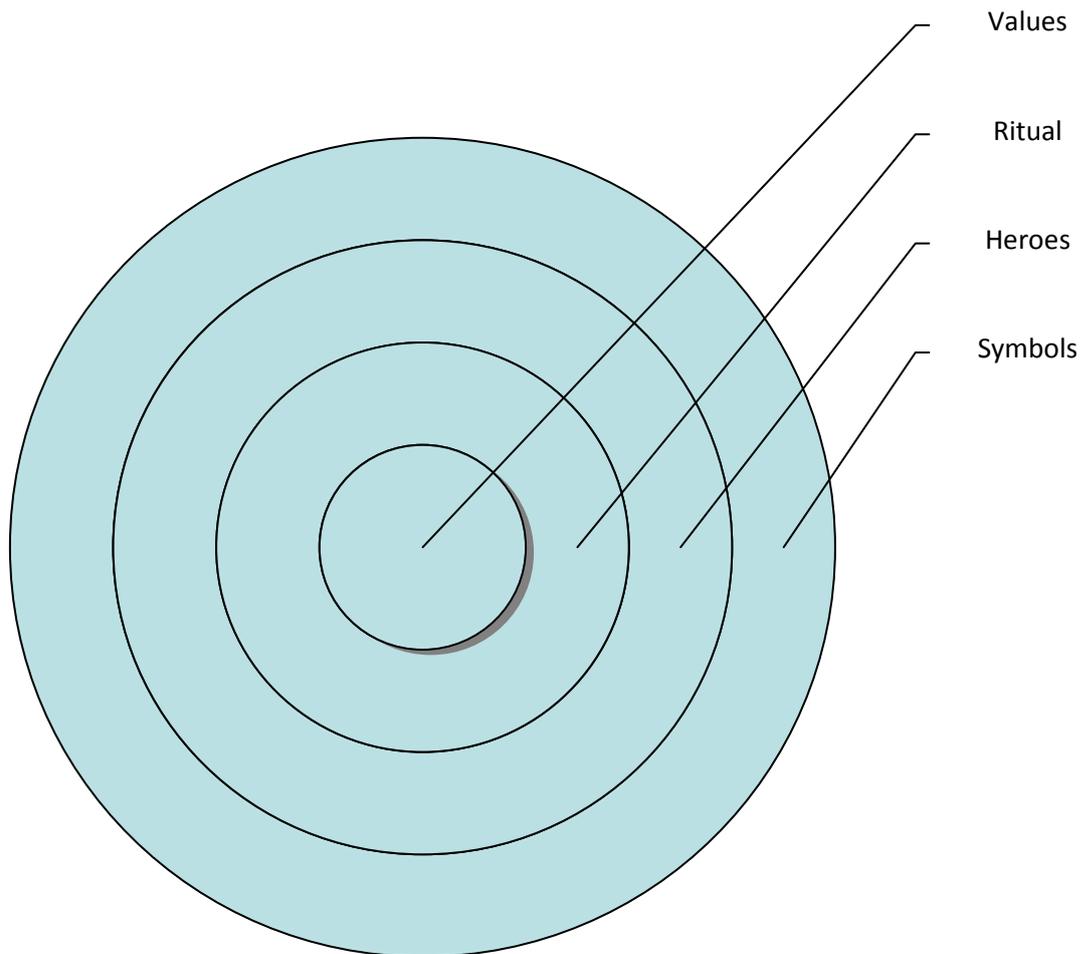


Figure 1: Hofstede's Model of Cultural Manifestation

The culture of work (C2) is an asset for any employer. But it is equally good for employee too. The social responsibility of doing one's work rightly and correctly requires an attitude and integrity. And, attitudes are easily formed through social learning and social comparison. The initial point of this attitude formation takes place in the family, followed by school, place of work and so on. The attitude toward work and other human beings is hence an important cultural resource. During apartheid in South Africa the state tried to instil negative attitudes rewarding racial segregation which finally brought an economic and political collapse to the erstwhile government. This is a living example which shows that the collective attitude of the nation has the immense power to alter the reality.

Human values (C3) are the other ingredients of cultural capital. In the world, almost all cultures have these ingredients and have generated their list of rights and wrongs. Most societies or cultures have almost same values but different cultures emphasize these values differently. A society devoid of human values cannot push the frontier of human progress too far.

### ***Role of Human Capital (HC)***

*Human Capital (HC)* is other source of human progress. The role of human capital so far has been discussed in generating economic value. In 1960s, a group of economists and sociologists from the University of Chicago laid the foundation of human capital economics. Pioneer experts such as Gary Becker, Theodore Schultz, Burton Weisbrod and others developed this strain of development economics. Becker (1962) developed a theory of investment in human capital and tried to explain earnings as a function of educational attainments on the job, schooling, and others. Since then a voluminous literature has emerged in this area (Schultz, 1959; Schultz, 1962; Denison, 1962; Weisbrod, 1962).

Human Capital has been referred to be as the stock of competencies, knowledge and personality attributes embodied in the ability to perform labour so as to produce economic value; it is the attributes gained by a worker through education and experience (Sullivan and Sheffrin, 2003). However, this view of education producing the human capital is a narrow one, as education not only enables human beings to earn more by providing with skills, it also enables them become rational, reasonable, and more open to other cultures and worldviews. It all depends upon what kind of education is being given to human masses.

The current education leads to building human capital in the form of different types of skills in the people which can finally push the foundation of human progress forward. Broadly speaking a society needs a mix of various types of skills in appropriate proportion. Education is the key resource to cultivate these skills that an economy needs to move forward. The current education caters to society with some nine types of skills. These skills are briefly discussed below:

- **Basic skills:** These include skills like literacy, numeracy, using technology or state of art of production. These are developed capabilities that facilitate learning or rapid acquisition of knowledge.

- **Communication or people skills:** It includes communication, interpersonal, team-working and customer servicing skills, negotiation, persuasion, social perceptiveness, etc.
- **Thinking and creative skills:** It would cover skills of comprehension and analysis. This may refer to collecting and organizing information, problem-solving, innovative and creative skills such as writing a story or designing a new solution.
- **Organizational and management skills:** This may refer to organizing people, time, facts information to achieve a desired objective; managing people and other resources to achieve the goals of the society.
- **Envisioning and planning skills:** A society's future depends on how its people evaluate future realistically and act on it. Whether leaders and elite bureaucracy works in unison to command the desired ways in future and around catastrophes and cataclysm. Societies who could not envision future forces and did not act on time died prematurely.
- **Technical skills:** It refers to knowledge of and proficiency in certain specialized fields such as engineering, computer, accounting, manufacturing, economic management of a business or economy.
- ***Governance and conflict resolution skills:*** These skills may refer to judgement and decision making skills after considering the relative costs and benefits of potential actions to choose the most appropriate one, understanding how systems of organizations, institutions or people work. Politicians and bureaucrats possess these skills.
- ***High mathematical skills:*** This would refer to handling advanced mathematical skills and only a few can have these skills.
- **Research skills:** This refers to skills of conducting research and finding out the solution.

A society should cultivate these skills in her people to move the frontier of human progress forward. Lack of any skill can hamper the progress to a social bliss point<sup>3</sup>. For example, despite the good economic health of the country in medieval India, the country was enslaved by the foreign invaders damaging the potential Indian Renaissance which was about to happen. Lack of conflicting resolution skills and governance and envisioning skills among the rulers of that time led to such catastrophe in the history which brought pain and death to millions and we are still bearing the brunt of these historical mistakes. However current education is not good enough as it ignores many other aspects of human evolution and human capacity. A re-look is essential at the education that we are imparting to our children and graduates in the country.

### ***Role of Social Capital (SC)***

If we create an education system that just meets the input needs of some specific industries, we will lose some very important talents such as poets, philosophers and others who help us build a good civic society and give vision of a society that we want to create. For example, *Sare Jaha se Achcha Hindusta Hamara* produces a value of integration that we cannot quantify and put a price on it. This aspects of education is now explored by the concept of *social capital* (Putnam, 1993, 2000; Coleman, 1988)<sup>4</sup>. The World Bank has used this concept as a useful idea and increasing evidence has been gathered to show that social cohesion is critical resource for societies to grow and prosper (World Bank, 1999). The key thesis of social capital is that the relationships matter (Field, 2003, pp. 1-2). In other words, best interactions among people permit them to build trust and which allows communities to unite and progress (Beem, 1999, p.20). However, there are times when negative interactions between people can create disharmony and affect the societal progress in a negative manner and harm the path of human progress.

Different types of social capitals have been identified: bonding, bridging, and linking types (Woolcock, 2001, pp. 13-14). Bonding social capital is between people in similar positions such as immediate family members, close friends and neighbours. Bridging social capital signifies more distant ties among people such as workmates, professionals, etc. The third linking type social capital points to ties between people in dissimilar situations (Woolcock,

2001, pp. 13-14). Putnam (1995) has shown that social capital in the United States declined during the last three decades of 20<sup>th</sup> century as various indicators of civic engagement (voting, political participation, newspaper readership, and so on) declined. For example, number of conflicts increased from 1960s to 1990s the fact which bred a good deal of legal and court battles (Putnam, 2000). We can see similar trends being witnessed in India too.

The recorded benefits of social capital are better child development, low crime rates, cleaner public places and more civic interactions among people, and better health (Rothstein, 1998; Haidt 2006; Offer 2006; World Bank, 1999). Social capital in organizations can lead to better sharing of knowledge, lower transaction costs, and greater coherence of action (Cohen and Prusak, 2001, p. 10). Increased level of cooperation and trust within the firm, market, and the state leads to greater economic growth. Countries or regions with higher stock of capital in terms of generalized trust and widespread civic management achieve higher levels of growth compared to societies with low trust and low civic engagement (Brown and Ashman, 1996; Krishna and Uphoff, 1999; Knack and Keefer, 1997).

### ***Role of Moral Capital***

There is also a moral capital which refers to justice, beneficence, and temperance, and is different from social and human capital (Ratnapali, 2002). Ratnapali (2002) notes that moral capital is being depleted in poorer countries as the institutions of justice are weak and this in turn hampers the commercial or economic progress by way of nepotism, cronyism, lack of transparency and accountability of public authorities, arbitrariness by the state, and so on. The antislavery movement of England is credited to building of moral capital which eventually led to emancipation of slavery (Brown, 2006). Moral capital can bring direct economic benefits as noted in Surinam (Gowricharn, 2004). Gandhi's *Satayagraha* movement was based on moral capital and *Quit India Movement* in 1942 made British known that she has very little moral capital in controlling people of India. This finally brought freedom to us.

Adam Smith was the first economic philosopher who argued that a commercial society is the net investor in the moral capital and recently this has been confirmed by the Benjamin Friedman in his book "The Moral Consequences of Economic Growth" (Rosenberg, 1990; Friedman, 2005).

## **Role of Elders Capital**

The elders of any society gain wisdom from their lived experiences. Elders not necessarily refer to old people here. What we are emphasizing is the totality of lived experiences. The elder knowledge exists everywhere in indigenous communities, organizations, governments, and so on. This knowledge is lost when we do not have mechanisms to sustain and store them. This is the knowledge that is local and tacit in nature, generally transmitted orally, experiential rather than theoretical, learned through repetition and constantly changing (World bank, 1998; Ellen and Harris, 1996). For example, a vast amount of knowledge on alternative health remedies is the special thing that most indigenous communities possess yet it is being lost today for want of proper institutions to sustain them.

The indigenous knowledge is a unique to a culture or society and this is passed from one to the next generation through word of mouth and cultural rituals. This has been the basis for local decision-making in agriculture, health, natural resource management and is embedded in community practices, institutions, relationships and rituals (World Bank, 1998). It is a tacit knowledge which is not readily codifiable. The indigenous knowledge of communities have some common themes: 1. connected to environmental and humankind values; 2. deeply committed to community; 3. giving back to society or the greater community; 4. holistic perspective and approach to learning; 4. recognition of informal learning in addition to formal learning environment; 5. story sharing and dialogue as mode of learning (Kawalilak, 2004; Merriam et al., 2007). Story sharing through dialogue can create knowledge and shared understanding between people the fact which then intensifies the understanding of the community; both story sharing and dialogue have the potential to transform the perspective and societal relationships (Bohm, 1996; Bohm et al, 1991; Ellinor and Gerard, 1998). There is a saying that, when an elder dies, a library burns (Airhihenbuwa, 2007). Elders knowledge is hence an important resource for sustainable living and growth.

## **Education and Its Linkages with Capitals: A Conceptual Model**

The word education comes from the Latin word *e-ducere* meaning to lead out. That is, to know or develop knowledge in the broadest sense. Education should hence bring change in the human behaviour for the betterment of the individuals and the society at large. A

purposeless education is bound to take us nowhere. Ancient Indian civilization stressed on the holistic learning experience (Bhatta, 2009). In recent survey of some American schools, Forbes and Martin (2004) have indicated two groups of measures to relate to holistic education: 1. ultimacy which captures religious, psychological, and other undefined nature of skills; and , (2) the sagacious competency in terms of freedom, good-judgement, meta-learning, social mobility, refining values, and self-knowledge. The ancient education of India inculcated the concept of social consciousness based on the love of humanity, character and honest based on moral law, and discipline based on sense of duties and responsibilities of the individual (Ramajois, 1987). A holistic education should cultivate all the four kinds of capital in appropriate proportion to suit the needs of the society in question. Thus we have four types of education:

- Human capital augmenting education (KE1)—cultivates specialized educational investments which produce different types of skills (these include some 9 types of skills as discussed above) (K1-Human Capital);
- Moral capital augmenting education (KE2)—cultivates human values education that produces social consciousness, character, discipline, self governance or emotional development (K2- moral capital);
- Social capital augmenting education (KE3)—cultivates civic virtues and connects individuals, institutions and generates norms of reciprocity and trustworthiness (K3- social capital);
- Elder capital augmenting education (KE4)—cultivates the experiential learning from elders or more experienced persons (K4- elders capital).

The holistic education (KE) hence is the sum of the above or  $KE = KE1 + KE2 + KE3 + KE4$ . The current education system corresponds closely to KE1 type of education, which is human capital augmenting. This thus increases the stock of human capital in the country. We are still missing other three types of education and thus lacking K2, K3 and K4 types of capitals in the country. The human progress (P) can thus be defined as the product of cultural capital (C) other capitals (K) or  $P = KC$  or  $P = (K1 + K2 + K3 + K4) * (C1 + C2 + C3)$

The education which would create all-round growth of the society would entail the simultaneous development of all four types of capitals. Therefore, a society should initiate actions to enrich the education and make it holistic one. The current education system is primarily geared to augment the human capital and very little or no emphasis is given to other types of capital, the reason being that it prepares the person for the employment market. It may be noted that heavy emphasis on human capital development brings reward in terms of economic growth but it does create other imbalances in the society which are not good for the long-term health of the society. As a result, as we spend more on KE1, we focus less on KE2, KE3, and KE4. We have a bias toward spending into KE1 as this kind of education is essential for physical existence or jobs.

The current education (KE1) system needs a reform so that all other types of education are given due weightage in order to generate an appropriate mix of all types of capital (Figure 1). Furthermore, the current education promotes only one type of cultural capital (C2) and no emphasis is laid on promoting family values (C1) and human values (C3) (Figure 1). In Figure 1, these linkages between education and capital are shown by solid and dotted arrows. The solid arrows indicate the existing linkages where the dotted ones indicate the potential linkages that can be strengthened by enlarging or reforming the current education system.

The reform in the current education system in general is required for three principal reasons. Firstly, the lop-sided development of society by investing in human-capital augmenting education alone and ignoring or giving less attention to other education types, is making individuals good for the work alone, thus losing other enriched values of human life such as passion for fellow citizens and love for family and so on. The dwindling family values and human values are already corroding the very core of human existence and its repercussions are exhibited through psycho-somatic health of people. It is to be noted that, “money cannot provide happiness but the liberty and security that commercial society provide help assuage the greatest source of misery” (Rasmussen, 2006). At the societal level, this gets translated into other deformities such as increased violence and loss of personal happiness of individuals. The infusion of moral, social, and elders capital in individual’s lives will bring a balance and supposedly happiness too.

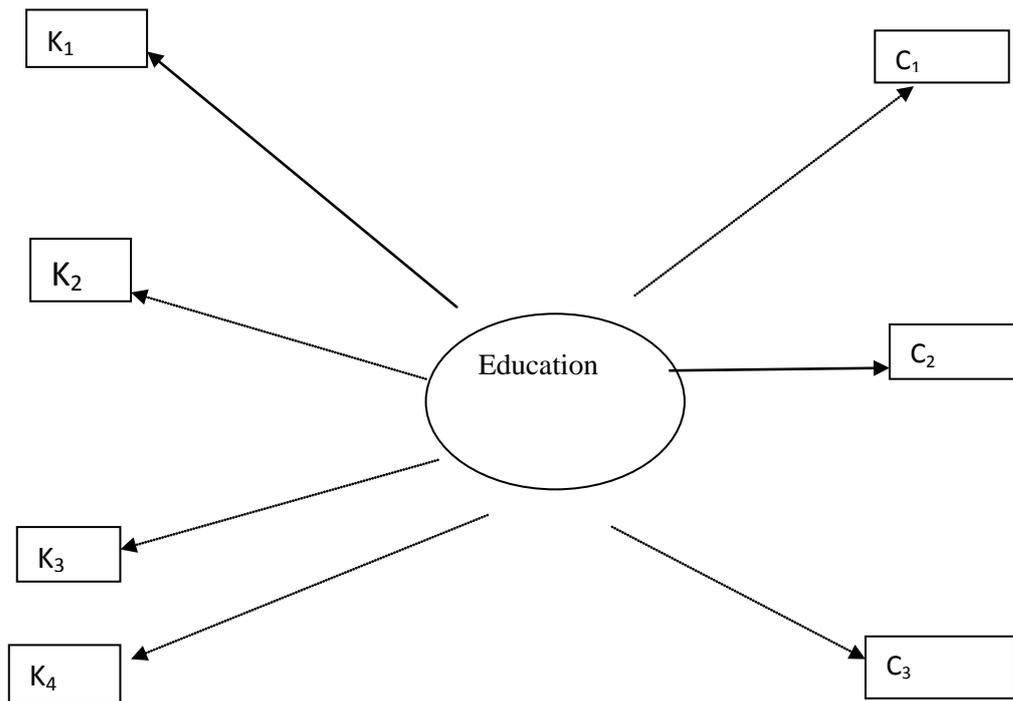


Figure 1: The Conceptual Model of Human Progress: Education and its Linkages with Different Kinds of Capital

Secondly, the preoccupation of the western material progress has certainly imbued the virtue of economic life-- that one exists only for creating economic value for the society. If one fails to do so, he/she has to live on social welfare fund and the individual is relegated to a life of low moral value and such individuals are seen as living off the others' taxes. But, in societies like India, many citizens choose a life of ascetic and abandon good wealthy life for god realization and seek subtle things in life such as *Moksha* or salvation unlike wealth accumulation. These citizens are looked as high moral people and respected and they do not contribute directly to economic wealth of the country but add the cultural value to people. They can influence the masses in changing the course of the history. For example, Swami Vivekanand and Budhdha are two shining examples of Indian civilization who have changed the course of human mind not only in the subcontinent but all over the world.

Thirdly, the prevalent educational philosophy of today is based on the western model which developed during the European Renaissance during the 14<sup>th</sup> century. The whole philosophy is based on the curriculum based transmission of knowledge by the experts in the field. The model is very powerful one and has brought a revolutionary change in the society during the last 500 years of human progress. It is based on the assumption that man is supreme in the universe being the most knowledgeable entity and hence can subjugate the nature. Most of this progress can hence be attributed to: the scientific inquiry model of cause-effect and the belief about the man's supremacy over nature. However, since 1970s and afterwards, we have witnessed that evidences related to environment and climate change have forced us to re-think the man-nature relationship. In the 21st century, we have now started rediscovering the ancient wisdom of eastern religions and accepting the man and nature in a symbiotic relationship.

An education reform would require making some interventions in the current system. This requires a conceptual framework, a strategy, followed by an operational plan which can be enacted within a reasonable time framework. The discussion of all this is out of the current study. However, the basic principles of reforms are suggested here in brief. I contemplate three types of changes that needs to be made in the current system of education.

One, current education has followed a value neutral approach, thus ignoring the moral aspects of change. Incorporation of right and wrong based on the model of humanism will at least be the most acceptable change to all ethnic and cultures in the world. The human values and human rights issues need to be understood and respected by all. Moreover, there is further need to understand the human rights issues with special reference to local cultures.

Two, the ancient wisdom and elders knowledge capital needs to be exploited for the benefit of human kind. Advancement of knowledge in the past has come at the cost of the local values and norms which were considered superstitious and redundant. For example, the idea of celibacy or *Brahamcharya* before the married life was an ideal inculcated by the Hindu culture (perhaps also in various other cultures too). However, during the past 40 years, this was considered a superstition and a part of fundamentalism by the western schools of thoughts. However, today with the onset of HIV-AID epidemic, we are realizing the value of

this norm and in fact the celibacy is being canvassed as a part of campaign to arrest the rising infections of the disease.

Three, no society can prosper and move forward if there is no social cohesion. Education should not just produce men and women to perform economic tasks alone but also produce leaders and visionaries who can bring social cohesion. Perhaps two important weapons of the west have been the technology and social cohesion which allowed them to win colonies and progress. Lack of social cohesion for the national objectives can only be achieved by promoting education that aims at building social capital for the progress of human beings.

## **CONCLUSIONS AND POLICY IMPLICATIONS**

Examining the past trend of human progress suggests that it has grown exponentially. The highest growth has been experienced during the last 100 years. The major driver of this progress has been the man's quest for knowledge to improve his/her wellbeing on the planet. The advancement of knowledge so far can be attributed to two important constituents: cultural capital and human capital. However, there are other sources of growth of human progress which include moral, social, elders capital as well. The current education falls short of holistic nature in that it does not have mechanisms to create social, moral, and elders capital. Education hence needs to be redefined and reformed to include these changes so as to augment not only human capital but also other kind of capitals which are sources of growth of human progress.

The reformed education should include: the special education taught in schools, colleges and universities, experiential education (learning by experiences), human value education (learning of subtle qualities of virtue and leadership from family, role models, and religious sources) and others. We need to imbibe the qualities of that great human beings through other means to create the perfectly humane society. Although these kinds of learning cannot take place in class room, their role in building a progressive society cannot and should not be ignored. Education of human values and histories of mankind is thus essential for all

## REFERENCES

Airhihenbuwa, C. O. (2007). "On Being Comfortable with Being Uncomfortable: Centering and Africanist Vision in Our Gateway to Global Health" **Health Education & Behaviour**, February, pp. 31-42.

Becker, G. S. (1962). "Investment in Human Capital: A Theoretical Analysis" **The Journal of Political Economy** 70(5): 9-49.

Beem, C. (1999). **The Necessity of Politics: Reclaiming American Public Life**, Chicago: University of Chicago press. pp. 311.

Bhatta, C. P. (2009). "Holistic Personality Development through Education Ancient Indian Cultural Experiences" **The Journal of Human Values** 15(1): 49-59.

Brown, D. L. and D. Ashman (1996). "Participation, Social Capital, and Intersectoral Problem Solving: African and Asian Cases", *World Development* 24(9):

Bohm, D. (1996). **On Dialogue**. In: L. Nichol (Eds.). London: Routledge.

Bohm, D., Factor, D. and Garret, P. (1991). **Dialogue: A Proposal**. Available at: [http://www.infed.org/archives/e-texts/bohm\\_dialogue.html](http://www.infed.org/archives/e-texts/bohm_dialogue.html). Retrieved on 10 August, 2010.

Brown, C. L. (2006). **Moral Capital: Foundations of British Abolitionism**, Chapel Hill: University of North Carolina Press, 480 pp.

Burton, A. W. (1962). "Education and Investment in Human Capital" *The Journal of Political Economy* 70(5): 106-123.

Cohen, D. and Prusak, L. (2001). **In Good Company: How Social Capital Makes Organizations Work**, Boston: Massachusetts: Harvard Business School Press. 214pp.

Coleman, J. C. (1988). **Foundations of Social Theory**, Cambridge, Massachusetts: Harvard University Press.

Denison, E. F. (1962). "Education, Economic growth, and Gaps in Information" **The Journal of Political Economy** 70(5): 124-128.

Ellen, R. and Harris, H. (1996). **Concepts of Indigenous Environmental Knowledge in Scientific and Development Studies literature: A Critical Assessment**. Draft paper presented in the East-West Environmental Linkages Network Workshop 3, Canterbury.

Ellinor, L. and Gerard, G. (1998). **Dialogue: Rediscover the Transforming Power of Conversation**, New York: John Wiley & Sons.

Field, J. (2003). **Social Capital**, London: Routledge. Pp 166.

Fitts, Catherine Austin (no date), 'Understanding the Popsickle Index.'" SolariF. [http://solari.cam/about/popsickle\\_index.html](http://solari.cam/about/popsickle_index.html). Retrieved on 30 June, 2010.07.

Friedman, B. M. (2005). **The Moral Consequences of Economic Growth**. New York: Alfred A. Knopf, 570 pp.

Ellinor, L. and Gerard G. (1998). *Dialogue: Rediscover the Transforming Power of Conversation*, New York: John Wiley & Sons.

Forbes, S. H. and R. A. Martin (2004). **What Holistic Education Claims about Itself: An Analysis of Holistic Schools' Literature**. Paper presented to the Holistic Education SIG, American Education Research Association Annual Conference, April, 2004

Gowricharn, Ruben (2004). "Moral capital in Surinamese Transnationalism", **Ethnic and Racial Studies** 27 (4): 607-621.

Haidt, J. (2006). **The Happiness Hypothesis: Putting Ancient Wisdom and Philosophy to the Test of Modern Science**, London: Heinemann.

Knack, S. and P. Keefer (1997). "Does Social Capital Have an Economic Payoff?: A Crosscountry Investigation", **Quarterly Journal of Economics** 112(4): 1251-1288.

Krishna, A. and N. Uphoff (1999). "Mapping and Measuring Social Capital: A Conceptual and Empirical Study of Collective Action for Conserving and Developing Watersheds in Rajasthan, India", *Social Capital; Initiative Working Paper NO. 13*, The World Bank.

Raskin, Paul; Taniq Bonuri; Gilberto Gallopin; Pablo Gutman; Al Hammond; Robert Rates; and Rob Swart. (2002). **Great Transition: The Promise and Lure of the Times Ahead**. A Report of the Global Scenario Group (GSG), Stockholm Environment Institute, Sweden.

Hofstede (1991), *Cultures and Organizations: Intercultural Cooperation and Its Importance for Survival*. London: McGraw Hill. 279pp.

Kawalilak, C. (2004). *Illumination, An Adult Educator's Journey: Dialogues with Adult Educators and Adult Learners in Indigenous Western Australia*. Unpublished PhD Dissertation, University of Calgary.

Merriam, S. B., Caffarella, R. S., and Baumgartner, L. M. (2007). *Learning in Adulthood: A comparative Guide* (3<sup>rd</sup> edition), San Francisco: John Wiley & sons.

Mosses, Moris David (January 1980). "The Physical Quality of Life Index (PQLI)," *Development Digest* 1: 95-109.

Offer, A. (2006). *The Challenge of Affluence: Self Control and Well-Being in the United States and Britain since 1950*, Oxford: Oxford University Press.

Putnam, R. D. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton NJ: Princeton University Press.

Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*, New York: Simon and Schuster, 541 pp.

Ramajois, M. (1987). *National Unity, Equality, Rule of Law and Creating Men of Quality*. Karnatak University, Dharwar.

Rasmussen D. C. (2006). “Does “Bettering Our Condition” Really Make Us Better Off: AdamSmith on Progress and Happiness” **American Political Science Review** 100 (3): 309-318.

Ratnapali, S. (2002). **Moral Capital and Commercial Society**, International Center for Economic Research (ICER), Working Paper Series, Working Paper No. 41. 28 pp.

Rosenberg, N. (1990). “Adam Smith and the Stock of Moral Capital”, **History of Political Economy** 22: 1-18.

Rothstein, B. (1998). **Just Institutions Matter: The Moral and Political Logic of the Universal Welfare State**, Cambridge: Cambridge University Press.

Schultz, T. W. (1959). “Investment in man: An Economist’s View” **Social Service Review** 33: 114-115.

Schultz, T.W. (1981). *Investing in People: The Economics of Population Quality*. Berkley and Los Angles: University of California Press.

Sullivan, Arthur and Steven, M. Sheffrin (2003). *Economics: Principles in Action*. Upper Saddle River, New Jersey: Pearson Prentice Hall p.5.

Woolcock, M. (2001). “Place of social capital in understanding social and economic outcomes”, **Isuma: Cnadian Journal of Policy Research** 2(1): 1-17.

The World Bank (1998). **Indigenous Knowledge for Development: A Framework for Action**, Knowledge and Learning Center, Africa Region.

The World Bank (1999). **What is Social capital?**, Poverty Net. Available at: <http://www.worldbank.org/poverty/scapital/whatsc.htm>

## Notes

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<sup>1</sup> The idea of human development index was devised and launched by Mahbub ul Haq in 1990 using the Amartya Sen's work on capabilities and functioning as the underlying conceptual framework. The Human Development Reports of the World Bank now report these indexes for most of the countries.

<sup>2</sup> See also (1) <http://www.tamu.edu/classes/cosc/choudhury/culture.html>. Retrieved on 2 July 2010).

<sup>3</sup> A Social Bliss point is used here denote a state of society when it is fully developed in all forms and purposes for the benefit of humankind.

<sup>4</sup> Social capital refers to the institutions, relationships, and norms that shape the quality of and quantity of a society's interaction. It is the glue that holds the institutions together (World Bank, 1999). Indicators of social capital can be as voting, newspaper readership, and so on.