ISSN Print: 2394-7500
ISSN Online: 2394-5869
Impact Factor: 5.2
IJAR 2016; 2(3): 840-842
www.allresearchjournal.com
Received: 25-08-2016
Accepted: 27-09-2016

Dr. Mona Kansal
Associate Professor, Maharaja Agrasen College, University of Delhi, Delhi, India

Correspondence
Dr. Mona Kansal
Associate Professor, Maharaja Agrasen College, University of Delhi, Delhi, India

Role of digital technology in human capital formation through higher education

Dr. Mona Kansal

Abstract
The Global agenda of digitalization of higher education for creating a knowledge society has been followed by most of the countries in recent times. Human capital formation has been given utmost importance by countries all over the world in the last few decades. Technology is the future of new India and investment in higher education is a potent investment of creating a knowledge society. The present paper is an attempt to assess that when the integration of higher education and digital technology takes place then how it contributes to the achievement of the mission of forming a" New India".

Keywords: Digital Technologies, higher education, ICT, Human capital.

Introduction
Countries worldwide and unexceptionally need to improve the skills and knowledge-base of their population in order to sustain economic growth, maintain a competitive position at a global level and improve the quality of life of their citizens simultaneously. Higher education is the major component to the human capital theory as it transforms in knowledge addition and affects the quality of labor. Higher education is the instrument needed for the ensuing development of a knowledge society. Higher education is the instrument which is needed to upgrade the skills and knowledge of a country's workforce in order to sustain national economic growth as well as to maintain a competitive position internationally. In micro terms, this is understood to mean producing more qualified people, who in turn access better jobs, earn higher salaries and improve their quality of life. That is why higher education globally has experienced increasing massification, characterized by students demanding extended access and flexible learning opportunities.

Literature Review
Young (2002) [2] found that the Information and Communication Technology (ICT) increased the capabilities of learners in transmitting the education anywhere and anytime. This flexibility increased opportunities for people who had constraints. Mobile technology and seamless communication gave added advantage of communication in teaching and learning. Moretti (2004) [16] revealed empirically that education enhances skill intensity. Lal *et al*. (2013) [15] found that the firms who had highly skilled labor performed better than those who did not possess it. Fojtik (2014) [7] found that the maximum used instrument in this new era of education is the technology of multimedia, online learning, mobile learning, e- learning, blogs and social networks. M- Learning is an emerging field not only in education but in labor markets also. Azma (2011) [1] concluded that the educational technology makes the students to score more and expands the access to information, making it dynamic and interesting. Floridi (2014) [6] found that there are various tools which combine education with ICT to allow greater communication. They are in the form of learning analysis, adaptive learning, artificial intelligence, automated tests and peer reviews. Mincer (1974) [11] developed the base model which explained the differences in individual income as a function of the work experience and the education level. Kottemann *et al*. (2009) [12] studied the correlation between the quality of education and Information and Communication Technologies of 122 countries. They also found positive correlation between these two and that the quality of education and technological developments affect the per capita income.

They also observed that ICT played an important role in the quality education of these countries.

Objective of the Study

The assertion of the present paper is that the mission of building a 'New India' which is underway will be incomplete and partial if higher education, which is an essential component of society and nation, is not advanced digital technology driven.

With this assertion, the present paper attempts to find out the impact of integration of Higher Education and digital technology on the achievement of the mission of 'New India'.

Integration of New Technologies and Higher Education

Education should be a right of all citizens, which by definition means that it must be accessible to all. The introduction of Information and Communications Technologies (ICTs) in education, through means such as e-learning, has allowed those who live in isolated places, single mothers, the disabled and other often excluded groups, to benefit from educational opportunities. The massification of higher education has resulted in institutions extending their access to meet the varied needs of students. ICTs have supported the growth and diversification of academic quality and supply while reducing social differences.

The use of new technologies appears to be an effective alternative for achieving widespread quality education for a large number of people. These new technologies can be utilized to improve access to, and quality of, education. In the current context of globalization, the application of new technologies for education can be used to try to answer questions related to the challenges facing many countries, including India.

In this context, higher education institutions have to re-conceptualize the notion of learning as a means of building up knowledge in a participatory and collaborative way. Instead of a hierarchical process of learning from teacher to student, the teacher serves more as a facilitator, where every student plays a central role. Learning now spans different generations and is not concentrated just in one period. Education programs constantly need to be updated and teachers trained in both formal and non-formal environments, not exclusively in the classroom. In view of this, new methodologies for teaching will be required.

Higher education needs to be balanced between student expectations and market requirements. In this context, e-learning is a particularly appropriate means of working. First, it should be recognized that the 'net generation', made up of 'digital natives', born into the digital world, is characterized by being connected (via the Internet), immediately and efficiently. Secondly, the target learners want to advance and improve their knowledge-base. Thus, according to the advanced technology used and the interactive flexible methods of teaching, e-learning responds to these demands by providing a flexible framework for studying.

The potential for using new technologies in higher education includes innovative ideas such as:

a) A flexible and mobile system that can be adapted to the needs and potential of students, using various formats for various target users;
b) Access to knowledge and information with control in terms of the time, i.e., one can access information when one wants and wherever one is;
c) An interactive educational process where the participatory model of e-learning can generate a collaborative dynamic in which the student occupies a central role;
d) Access to a great quantity of information, allowing students to reorient and upgrade the information they receive, enriching, building and modifying their learning modes, while not only accumulating but also constructing their own path to knowledge;
e) Extended access to abundant information which was previously only available physically (i.e., books in a library).

The Path Ahead For New India-Technology Driven Higher Education

New India is forward looking and not backward looking. Technology is the future and the future is technology. Higher education should also be able to meet Indian requirements and challenges. Any education system devoid of digital technology will have a damaging effect on New India.

Accelerated changes in technology can generate different effects. On the one hand, they stimulate a permanent renewal of knowledge and updating of teaching methods; on the other hand, this can challenge established and proved academic strategies, revealing weaknesses not only of the teachers, but also of other stakeholders from the educational field, who may find this development unfamiliar, unpredictable or even risky. Amalgamation of Higher Education with advanced digital Technologies is the key to transform India's population into a human development hub.

The policy makers should emphasize on investments in advanced technology and higher education in order to achieve economic development of India. For ongoing changes in higher education, there is a need for further research. Inter communication between educational institutions and policy makers is also required.

Conclusion

The higher education landscape of the country affects the demographic dividend benefits which can be used for the development of the country. Education forms a base for high quality of human capital which ultimately results in economic development. Investment in higher education is a must in order to get quality human capital. Digital Technology has linkages with higher education and positively it will yield millets in the long run as well as in the short run.

The new India which is on the way will be built on strong foundations with lasting standing and with sustainable growth only if its higher education strategy is formulated with a digital technology component. Such a sustainable education strategy will pave the way for India to become a world leader.

References

1. Azma F. The Quality Indicators of Information Technology in Higher Education. Procedia – Social and Behavioral Sciences 2011;30:2535-2537.
2. Becker SG. Human Capital: A Theoretical and Empirical Analysis with SpecialReference to Education

(3rd ed). London: The University of Chicago Press 1993.
3. Beyers RN. A five-dimensional model for educating the next generation', Educational Technology & Society 2009;12(4):218-227.
4. Chen W, Wellman B. The global digital divide–within and between countries. IT & society 2004;1(7):39-45.
5. Davenport OT. Human Capital: What it is and Why People invest it. Oxford: Jossey-Bass Publisher 1999.
6. Floridi L. The 4th revolution: How the infosphere is reshaping human reality. Oxford: Oxford University Press 2014.
7. Fojtik R. Mobile Technologies Education. Procedia – Social and Behavioral Sciences 2014;143:342-346.
8. Gikas J, Grant MM. Mobile computing devices in higher education: Student perspectives on learning with cellphones, smartphones & social media. The Internet and Higher Education 2013;19:18-26.
9. Hall GE. Technology's Achilles Heel: Achieving High-Quality implementation', Journal of Research on Technology in Education 2010;42(3):231-253.
10. Jacob Mincer. Human Capital and Economic Growth," Economics of Education Review 1984.
11. Jacob Mincer. Schooling, Experience and Earnings," National Bureau of Economic Research 1974.
12. Kottemann JE, Boyer-Wright KM. Human resource development, domains of information technology use, and levels of economic prosperity. Information Technology for Development 2009;15(1):32-42.
13. Lal K. E-business, Entrepreneurship, Organizational Restructuring: Evidence from Indian Firms, In: AshwaniSaith and M. Vijayabhaskar (Eds.), ICTs and Indian Economic Development: Economy, Work, Regulation, New Delhi, London: Sage Publications 2005, 366-85.
14. Lal K, Shakya SP. Impact of Information and Communication Technologies on Rural Higher Education in India, In: Prabhath, S.V. and Sita Devi, P. Ch. (Eds.), Technology and Rural India, New Delhi: Global Research Publications, 2011.
15. Lal, Kaushalesh, Paul Shampa. Export orientation and corporate policy during global economic slowdown. In: ServIitization, IT-ization and Innovation Models: Two-stage Industrial Cluster Theory, Edited by Hitoshi Hirakawa, KaushaleshLal, Naoko Shinkai and Norio Tokumaru (London and New York: Routledge) 2013.
16. Moretti Enrico. Workers' Education, Spillovers, and Productivity: Evidence from PlantLevel Production Functions. The American Economic Review 2004;94(3):656-690.
17. Schultz WT. Investing in People: The Economics of Population Quality. London: University of California Press 1981.
18. Sridhar S. E-Government - A proactive participant for e-learning for higher education', Journal of American Academy of Business 2005;7(1):258-268.
19. Tearle P. A theoretical and instrumental framework for implementing change in ICT in education', Cambridge journal of education 2004;34(3):331-351.
20. UNESCO. Manual for pilot testing the use of indicators to assess impact of ICT use in Education, UNESCO 2003.
21. Utulu SCA. Information Technology and Web use Characteristics of Nigerian Private Universities. African Journal of Library, Archives and Information Science 2008;18(2):119-130.
22. Young J. The 24-hour professor. The Chronicle of Higher Education 2002;48(38):31-33.