Status and Trends of Educational Media in India: Allusion to Dr Bhupen Hazarika, a pioneer in Educational Media Research

Second Dr. Bhupen Hazarika Memorial Lecture organised by Krishna Kanta Handiqui State Open University in association with Directorate of Information and Public Relations, Government of Assam on 5 November 2013 at Guwahati

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- 1. Honourable Minister of State for Information and Public Relation, Govt of Assam, Sh. Basant Das, esteemed Prof. Srinath Baruah, Vice Chancellor, K K Handiqui State Open University, Sh. Jayant Kastuar, distinguished Kathak exponent, distinguished guests, ladies and gentlemen, at the outset I would like to express my deep sense of gratitude to the Vice Chancellor and members of the Board of Management of KKHSOU, and the Ministry of Information and Public Relations, Govt of Assam for inviting me to deliver this second Dr. Bhupen Hazarika memorial lecture. It is a matter of privilege and honour for me to be with you today to pay homage to Padma Vibhusan Dr. Bhupen Hazarika, the illustrious son of the soil.
- 2. Everyone loves music. It is universal. Language is not a barrier to appreciate music, and therefore, it is beyond literacy. Dr.Hazarika's music is eternal and connects with the people, and because of which is loved by so many people of this country. This is known to most of us. While doing my research for this lecture, I learnt about many facets of Dr. Bhupen Hazarika, and the most important aspect that strikes my thoughts and imagination was his doctoral degree in education earned at the Teachers College, Columbia University in 1952 with title "Proposals for Preparing India's Basic Education to use Audio-Visual Techniques in Adult Education"¹. With the help of Dr. Ankuran Dutta, I could lay my hands on this dissertation. Reading the dissertation gives us an insight into the thinking of Dr. Hazarika and the nature of his concerns of independent India at that time. Interestingly many of the ideas and thoughts therein are still relevant and useful, and I would like to highlight some important aspects of his work that focussed on use of audio-visual aids for adult education. The premise of his work covered:
 - Education is necessary for a strong and vibrant democracy;
 - Education should help everyone, including farmers, labourers, weavers, parents, and tribal population of India;
 - Education should foster rational inquisitiveness of human beings;

¹<u>http://pocketknowledge.tc.columbia.edu/home.php/viewfile/9566</u>

- Visual symbols play significant role in the society, especially in the democratic process;
- In order to improve basic social education, audio-visual methods play a significant role;
- Basic teacher training courses should include competencies of audio-visual methods of teaching;
- Adult illiteracy is a major problem for overall development of the country;
- One-world thought can be imparted through use of audio-visual media, as they have the power to transfer thoughts without change and even illiterates can understand them;
- To achieve the goal of world citizenship we bring the world to the community, and radio can play a significant role in this;
- The process of measurement of community behaviour is best carried on by the adult members of the village, and therefore, to educate adults group experiences must be used for social informal education;
- Audio-visual materials produced by the United Nations and UNESCO be used by adult educators for a better understanding of the basic unity in diversity, and strengthen democracy.
- I am sure none present here will dispute on any of these thoughts, and will agree that these are still relevant today. In this context, the theme of today's talk as decided by the organisers – Educational Media in India -- is a real tribute to Dr. Hazarika.
- 4. I will review and analyse the work in this area in Indian context, though will also bring a worldview to highlight some of the mis-conceptions prevalent amongst many educators and policy-makers towards use of technology and media in education. But, before I delve into today's topic, let me say a few words about my organisation for the benefit of those of you who are uninitiated to the Commonwealth of Learning² or CEMCA³.
- 5. The Commonwealth of Learning was established in 1987 by the Commonwealth Heads of Government to encourage the development and sharing of open learning/distance education knowledge, resources and technologies. COL is helping developing nations improve access to quality education and training.
- 6. The Commonwealth Educational Media Centre for Asia (CEMCA) was established by COL in 1994 to encourage, develop and foster the exchange and sharing of educational media techniques and resources, and promote meaningful and appropriate use of educational

² http://www.col.org

³ http://www.cemca.org.in

media in Commonwealth Asia. CEMCA has widened its scope over the years to embrace emerging educational technology formats, even while broadening the scope of education itself to cover formal, non-formal and life-long learning. However, our focus remains "Learning for Development" and we continue to foster quality improvements through appropriate use of media and technology.

- 7. On the theme of the topic, my presentation will cover: state of higher education developments in India; use of open distance learning (ODL); use of technology in education; problems of educational media use; emerging technological possibilities; and way forward.
- 8. The gross enrolment in higher education is currently at about 18.8% in India, though there are inter-state variations. For example, in Assam it is at about 9%, which is about half of national average. India has over 700 universities and about 35,500 colleges, with about 20.3 million students in absolute numbers⁴. Only 55 countries in the world have more population than the number of students enrolled in Indian higher education. The National Knowledge Commission estimated the need for 1500 universities by 2015. Do we have the necessary resources to create the infrastructure for higher education? As of now, only 21% universities are supported by private sector. There is also a paradoxical situation that number of seats in engineering and technical institutions are laying vacant, and many programmes and institutions are closing down their operations in the private sector⁵. What are the sustainable ways to increase access without compromising quality? How can we create enabling policies that will foster such an environment?
- 9. Probably answers to all such types of questions lie in understanding and appropriate use of media and technology for teaching and learning. Since independence, we have improved manifold in use of audio and visual media in education. From use of radio and audio to use of multimedia and the Internet, the journey had been with many ups and downs. Most of the time questioned and challenged does it really work? There have been experiments on use of interactive radio, and use of television and satellite for education supported by the Government, such as the Delhi School Television project in 1960s, and the highly successful Satellite Instructional Television Experiment (SITE) in 1975-76. A national focus group report on Educational Technology published by NCERT in 2006 reports⁶ some interesting facts:

⁴<u>http://www.ugc.ac.in/pdfnews/6805988_HEglance2013.pdf</u>

⁵<u>http://articles.timesofindia.indiatimes.com/2012-10-08/news/34322007_1_aicte-new-institutes-colleges</u> ⁶<u>http://www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/educational_technology.pdf</u>

- a. There was long gap in policies and practice of adoption of educational technology
- b. The Central Government in coordination with the states fostered the development and production of audio and video programmes and CIET at NCERT played important role
- c. While narrow field studies showed encouraging results, many initiatives to use educational technology grossly underutilised the facilities and failed develop linkages to the classroom
- d. The distribution of radio-cum-cassette players and colour television sets to schools between 1986-1990 did not yield desired results
- e. Computer in education was initiated in 1984 with the Computer Literacy and Studies (CLASS) project, which continued in different *avatars* for over two decades. Evaluations have indicated that these efforts were also resulted in modest success, as schools used computer as add-on rather than as an integral part of the education system.
- 10. In retrospect, these observations are hardly surprising, as most of the time these initiatives were largely top-down model and were not considered to create an ecosystem around the integration of technology into the teaching and learning process. At some places technical failure was a problem, at others lack of electricity and at many others, fear of loss of the equipment resulted into non-utilization. However, teacher capacity building to take advantage of the available technology was also not given enough thoughts. Where there was training, the technologies available at that time were complex as well as costly for sustainable use.
- 11. However, the establishment of Open Universities and especially the UGC Countrywide television programme in 1984 and Indira Gandhi National Open University (IGNOU) in 1985 created new understandings and conditions for use of video and television in education, and appreciation for educational technology amongst the masses through the national broadcast of educational programmes. The IGNOU introduced interactive television in 1992/93, which became popularly known as teleconferencing with one-way video and two-way audio, and in 2004, the Government of India launched the Educational Satellite (EDUSAT) which used Receive only Terminals (RoT) and Satellite Interactive Terminals (SIT) for two-way audio-video conferencing. The technologies demonstrated effectively that teaching and learning can be delivered effectively using technology, and my research on interactivity in teleconference concluded that

systematic planning of the interactive sessions, giving sufficient time for interaction, is key to help create a learning environment.

- 12. In 1998, following the Government of India's Task Force on IT and software development, IGNOU started Virtual Campus Initiative (VCI) and since then several online initiatives and programmes are on offer by several educational institutions in India. One of the programmes currently available online at IGNOU is the Post Graduate Diploma in eLearning⁷ (PGDEL), which is building capacities of the teachers to offer online programmes. It is important to emphasize here that while use of educational technology has been emphasized for long, capacity building of teachers have been sporadic. Teaching of educational technology as a discipline at the master's level is available in India only at one University, and in others educational technology remains as an optional course.
- 13. In 2007, the MHRD launched the National Programme on Technology Enhanced Learning⁸ (NPTEL) for engineering and basic science subjects to make available webbased and video courses online. With the success of this initiative, and search for a device to deliver content to the learners, the National Mission on Education though ICT (NMEICT) was launched in 2009, which is now the umbrella project of the Govt of India to encourage and support appropriate use of ICT in education. In addition, there is also a national policy on ICT@Schools announced in 2013⁹. Within the policy, the NCERT has developed a comprehensive curriculum for ICT training of teachers¹⁰ to help them integrate technology in the classroom. Probably, we have learnt lessons from the past experiments and projects, and have more focus on sustainable capacity building of teachers as against sporadic capacity building of teachers. The NCERT has also launched the National Repository of Open Educational Resources (NROER)¹¹that offers resources for all school subjects and grades in multiple languages. The NROER is expected to be an one-stop portal for learning objects available in the form of concept maps, videos, audio clips, talking books, multimedia, learning objects, photographs, diagrams, charts, articles, wikipages and textbooks.
- 14. As such, many of us have now understood that the key to effective use of technology is the affordance of the technology itself. Different media have different capabilities, and the right choice of the technology and its appropriate use for the needs of the learners

⁸<u>http://nptel.iitm.ac.in/</u>

- ¹⁰http://www.ncert.nic.in/announcements/notices/pdf_files/ICT%20Curriculuma.pdf
- ¹¹<u>http://nroer.in/home/</u>

⁷http://pgdel.ignouonline.ac.in/pgdel/home.html

⁹<u>http://www.teindia.nic.in/e9-tm/Files/ICT_Documents/ICTatSchoolsScheme.pdf</u>

make it effective. While efficacy of distance education and educational technology have been constantly questioned, there are hundreds of research studies showing "No Significant Difference"¹² in outcomes based on modes of education or technology use. We also have learned that appropriate use of technology can yield better outcomes. While there are concerns about effectiveness of media by those who actually have limited understanding of media with culturally induced bias towards face-to-face education, the problems of access to educational provisions for a society that is eager to learn, and limits of the Government to provide those provisions to create knowledge societies¹³ based on lifelong learning principles remain unaddressed. For India though, the situation is different; and we have one national university of distance learning, and 15 other state universities (including two in the private sector) that offer exclusively distance learning programmes. There are also many other universities and institutions offering distance learning programmes and courses. Thus, providing the opportunities to the citizens of this country to learn at their own pace and time and update and upgrade their knowledge and skills.

15. Distance education is largely technology mediated and asynchronous with possibilities for occasional face-to-face contact for remedial learning and practical skill development activities. It has become highly popular due to economies of scale, and research shows the cost of distance learning ranges from 5-50% of conventional face-to-face education¹⁴. While distance learning, including its new digital form – eLearning – is accepted worldwide, there are currently several concerns about quality of distance learning provisions. After five decades of distance education in India, there is lack of consensus on what good quality distance education is and how it should be regulated. While the initial thinkers in India considered teaching and learning in distance education should have different quality criteria, other developed countries adopted similar criteria for assessing quality of both face-to-face and distance education. After all learning should be learning, whether it is through face-to-face education or distance education. The basic difference in both the system is 'Time'. In face-to-face education time is constant, while in distance and online learning time is variable. The learner has the freedom to study at his/her own pace and time. In both though, learning should be constant and should not be compromised.

¹²<u>http://www.nosignificantdifference.org/</u>
¹³<u>http://knowledgecommission.gov.in/downloads/documents/towards_knowledgesociety.pdf</u>

¹⁴http://knowledgecommission.gov.in/downloads/baseline/ode.pdf

- 16. With the growth of online learning, the distance between distance education and faceto-face education is getting reduced. In the year 2012, many top class universities have started online courses in the name of Massive Open Online Courses (MOOC), which is a form of asynchronous digital distance learning. What the distance teaching universities were doing in the non-digital world is now being done by top class institutions like the MIT and Harvard. Certainly, this is giving more legitimacy to distance education and distance educators, who had always believed in educating the masses. According to Prof. Asha Kanwar, President and CEO of Commonwealth of Learning, "the ugly duckling is certainly poised to become a swan"¹⁵.
- 17. In India, the NPTEL started MOOC in the beginning of 2013 in three engineering courses¹⁶. In partnership with the IIT, Kanpur, Commonwealth of Learning is currently offering a course on Mobiles for Development as MOOC¹⁷. Recently, the University Grants Commission (India) has constituted a committee to look into the possibilities of integrating MOOCs in conventional classroom education. The possibilities of using the online technologies to deliver massive courses for assisting citizens to acquire and upgrade new knowledge and skills are enormous. While the MOOCs are still to develop business models for sustainability, they have shown that large number of people can take benefits from the course offerings all over the world transcending geographical barriers. If we critically look into some of these courses, they are actually replication of correspondence model of education in the digital world with one twist - the possibilities of social learning through peers. The MOOCs are also criticised for being behaviouristic and offer no new pedagogy¹⁸, but some MOOCs use connections to people and resources, and are based on the principles of connectivism, and therefore called cMOOCs¹⁹.
- 18. For many Indian educational institutions and teachers, the MOOCs provide wider opportunities to be more socially relevant by providing courses and programmes that are accessible to more people than just 20-30 in the classroom. The technology today is also simple, and teachers need not depend on programmers to develop online courses or video producers to capture and create videos. For a multilingual country like India, MOOCs also provide an opportunity to offer video courses in different languages. Thus, if you are an excellent teacher of ancient Indian history or any other topic/subject, you

¹⁵http://www.col.org/resources/speeches/2013presentations/Pages/2013-10-04.aspx

¹⁶http://nptel.iitm.ac.in/Onlinecourses/

¹⁷<u>http://m4d.colfinder.org/</u> ¹⁸<u>http://www.tonybates.ca/2012/08/05/whats-right-and-whats-wrong-about-coursera-style-moocs/</u>

¹⁹http://www.connectivistmoocs.org/what-is-a-connectivist-mooc/

can teach your 20 odd face-to-face students, and also can make the course available online to thousands simultaneously. In fact, this is how George Siemens and Stephen Downes started the first MOOC in 2008 offered by University of Manitoba on *Connectivism and Connective Knowledge*²⁰.

- 19. The other important aspect of MOOC is "Open", which means the courses are open to all without any restrictions. They are not only free of cost, but are also free from copyright restrictions and the contents are available under open licenses²¹. While not many existing MOOCs follow the true spirit of openness, the MOOCs have actually emerged from the Open Educational Resource (OER) movement. As more and more learning materials in many subjects and disciplines are available in open licenses, it is no longer required to develop courses *de novo*. Courses can be quickly and easily compiled and developed using already existing learning materials in open licenses. Thus, you can create MOOCs using already existing online resources, and offer to your students and many others sitting miles away from your institution.
- 20. Issues related to certification can be taken care of, if we develop appropriate policies to accept the credits earned through MOOCs. The OER University²² promoted by a host of leading universities, including some Indian universities is just an example. Availability of courses openly will also help other teachers and students to use the resources in their own contexts without seeking permission from the original creator.
- 21. Considering the importance of OER in educating masses, UNESCO and COL organised the World OER Congress in 2012, which released the OER Paris Declaration urging governments, educational institutions and individual teachers to release all educational materials produced with public funds in open licenses. The CEMCA has developed an institutional OER policy template²³ to help educational institutions easily adopt appropriate policy for OER. I am happy to share with you that two open universities in India have adopted OER policy. One of these two is KKHSOU, and I take this opportunity to congratulate the academics of the university to have taken such an appropriate step, and leading from the front. The other university is Vardhaman Mahaveer Open University.
- 22. We have been urging the Govt of India to adopt an open licensing framework through policy guidelines to assist more and more institutions to follow the path of these two leading institutions. We at CEMCA are also engaged in developing capacities of teachers

²⁰https://sites.google.com/site/themoocguide/3-cck08---the-distributed-course

²¹<u>http://creativecommons.org/</u> ²²<u>http://wikieducator.org/OER_university/Home</u>

²³http://www.cemca.org.in/ckfinder/userfiles/files/DRAFT%200ER%20POLICY%20template_revised.odt

to create quality OER. Interestingly, Dr. Hazarika's thesis has five criteria for evaluating the quality of audio-visual materials for adult learners. These are:

- a. Does it appeal to reason?
- b. Is it scientifically sound?
- c. Is it recent?
- d. Is the content substantial?
- e. Is it adaptable?
- 23. While the list of criteria²⁴ identified by us for quality of OER is much longer, we must appreciate the foresight and vision of Dr. Hazarika to have identified adaptability as one of the criteria for audio-video to make learning contextual. It is only with today's technology that such a visionary thinking can be accomplished with ease. However, copyright of knowledge resources makes it difficult to actually adapt them and contextualise. With the emergence of the OER movement, open licenses and understanding of creator's rights, Dr. Hazarika's vision of adapting and contextualizing learning materials can be achieved. Availability of OER and MOOCs will create a new ecosystem for lifelong learning for all, which was the dream of Dr. Bhupen Hazarika in his doctoral dissertation.
- 24. The educational media landscape of India is showing lots of promise to transform the 'power society' to 'learning society'. The need of the hour is to understand the potentials of educational media in the contexts of national development, and to have appropriate policy for open, distance and online learning, OER and MOOCs. Having good policies will create enabling environment to foster quality education for all, and strengthen India's democratic fabric. To conclude in the words of Dr. Hazarika -- Democracy must do more than give people a 'free vote'. I am sure our collective wisdom will do all that is needed to help create "the country we want" through education, and effective use of media and technology.
- 25. Thank you for your attention.

²⁴http://www.cemca.org.in/ckfinder/userfiles/files/OERQ_TIPS_978-81-88770-07-6.pdf