

Reviewing the barriers and opportunities of the open distance learning in Nepal

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Abstract

Open and Distance Learning (ODL) is a general term for the use of telecommunication to provide or enhance learning. As a great alternative to traditional, campus-based classes, distance education allows students to study on a more flexible basis. Nepal is one of the countries that are in urgent need to harness modern technologies to improve the quality of distance education as one of the most urgent solutions to improve the education process. But there are difficulties faced by researchers in this area, especially the scarcity of research. This paper aims to review the barriers and opportunities that assist in harnessing ODL in Nepal. The descriptive analysis methodology has adapted for conducting an intensive academic literature review. It analyzes governmental and non-governmental reports and literature that relates to ODL.

Keywords: open distance learning, web-based technology, information technology, web application.

1. Introduction

While there are many concerns expressed about technologically-mediated teaching, there are faculty members who applaud the opportunities technology brings to their teaching and their students' learning environment. While the survey data used in the analysis here is now a couple of years old, anecdotal conversation and review of current online discussion lists suggest the barriers to online teaching have not changed or changed very little. Many barriers to learning and teaching at a distance are caused by lack of access to resources and people. Further, the most critical obstacles reported in this survey appear related to persons' resistance to or fear of the many changes that must occur at the individual and organizational level. Add to these fears the lack of support for the changing roles of students and teachers and you have the ingredients that often lead to significant impediments to success in online education. Other barriers arise over difficulties in assessment: whether it involves evaluating students' online work, or the rewarding, compensating, valuing, and supporting of faculty members' teaching online as they develop technologically-mediated learning environments.

Online learning is a kind of distance education, in which the main component is the learner and the teacher at the time of teaching, and a mainstream of the process of instruction that content and instruction are conveyed

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largely over the Internet. At the same time the distance education is a system or method of instructing education in which there are no face-to-face communications. The intensive literature review has found the lack of studies that try to solve the weakness of utilizing e-learning technology to improve the dependence on the solutions of net-based learning. The key objective of this research is to propose a conceptual framework for enhancing integrating of e-learning and distance education in Nepal. The descriptive analysis methodology has adapted for conducting intensive academic literature review. It analyze governmental and non-government reports and other literature that relates to e-learning and distance education. The research exposed that it is vital to conduct in deep research in e-learning and distance education in Nepal and propose a proper conceptual framework.

2. Research objectives

This paper aims to review the barriers and opportunities that assist in harnessing ODL in Nepal. It tries to reduce the gap of the scarcity of studies and researches.

3. Research background

Distance education is considered to be a system or method of instructing education in which there are no face-to-face communications. At present face-to face contact is becoming accepted and fashionable in such mode of culture. The methods of distance education delivery help the ways of delivery of the courses conditional on the needs and nature of the subjects (Pradhan, 2011). The teacher or instructor is a facilitator of face-to-face communication or interaction and teacher counselor is the obtainable resource person locally for offering regular support to the students.

Nepali students and teachers had no options more than talk and chalk incorporating the textbook and blackboard as the materials of teaching, in the past. Most recently, they could utilize all probable materials of teaching covering video, audio, simulated and animated objects, Internet/Web tools, software tools, electronic pen, smart board, and several more as per the requirement of the class or lesson they intend. The culture of Nepali education is on a winning streak to generating a splendid shift in the direction of adjusting new and innovative technology (Dahal, 2014). Technology developed ODL is another chance or opportunity for the Nepali higher education institutions to attain the students all over the country and beyond. Hence, teaching or tutoring is not restricted within boundaries of all the four walls of a class or classroom; the courses are easily reached to each student linked to the Internet from all around the world and the distance education links non-formal and formal sectors. The open school system is said to be an optional route to the formal school schooling with external examination system, stipulation of school curriculum and differing in the materials of learning in the print form, broadcast telecast, audio-visual cassettes, audiovisual conferencing etc. all the way through resource materials, distance tutor and face-to-face contacts (Pradhan, 2011; Ali Abdulbaqi Ameen; Kamsuriah Ahmad, 2013; Ameen and Ahmad, 2013). This kind of education is proposed for all sorts of people for various purpose such as literacy, young and adults, technical, vocational and scientific. This method is most dynamic and potential for any country with developing or developed nature. Because of the advancement of technology, more efficient and effective learning materials and equipment are coming up that would develop the efficiency and quality of distance learning.

3.1 The internet world stats

The national information and communication technology policy 2015 is focusing on formulating policy responses in line with the dynamism of the ICT sector, namely issues surrounding cybersecurity, data protection, privacy and respect for intellectual property rights. Equally important is the need to address the challenges posed by technological convergence especially from regulatory and governance perspectives (Abdulrab et al., 2018). Given that telecom connectivity is fast expanding across the country, inching closer to saturation point, the focus should now shift to the demand side fundamentals that need to be strengthened to ensure strategic alignment of resourcefulness offered by ICTs with Nepal's growth and development aspirations (Isaac, Abdullah, Ramayah, and Mutahar Ahmed, 2017).

According to Internet World Stats (2017), the world internet usage is rapidly increasing and currently stands at 3.8 billion users, with Asia having an average penetration rate of 46.7%

Table 1. World internet usage and population

World internet usage and population statistics Dec 31, 2017 - Update						
World regions	Population (2018 Est.)	Population % of world	Internet users 31 Dec 2017	Penetration rate(% Pop.)	Growth 2000-2018	Internet users %
Africa	1,287,914,329	16.9 %	453,329,534	35.2 %	9,941 %	10.9 %
Asia	4,207,588,157	55.1 %	2,023,630,194	48.1 %	1,670 %	48.7 %
Europe	827,650,849	10.8 %	704,833,752	85.2 %	570 %	17.0 %
Latin America / Caribbean	652,047,996	8.5 %	437,001,277	67.0 %	2,318 %	10.5 %
Middle East	254,438,981	3.3 %	164,037,259	64.5 %	4,893 %	3.9 %
North America	363,844,662	4.8 %	345,660,847	95.0 %	219 %	8.3 %
Oceania / Australia	41,273,454	0.6 %	28,439,277	68.9 %	273 %	0.7 %
WORLD TOTAL	7,634,758,428	100.0 %	4,156,932,140	54.4 %	1,052 %	100.0 %

Source: Internet World Stats (2017)

Moreover, like other neighboring Asian countries, Nepal has a very encouraging prospect for improvement in the ICT services including internet usage as only 6.4 out of 29 million of Nepal's population are using the internet. Given the growth prospect illustrated in the national ICT policy 2015, the country is set to expand its internet services which will facilitate and encourage the concept of e-learning (International Futures Forecasts, 2014). A comparison of the internet users and population of Nepal and several Asian countries are shown in Table 1.

The past decade has seen a dramatic growth in the utilization of online, blended, and the approaches of distance learning in secondary and elementary education all over the world. Online learning is a kind of distance education, and the main component of that is "the segregation of learner and teacher at the time of teaching, a mainstream of the process of instruction" (Watson and Kalmon, 2005). Online learning is said to be "an education that content and instruction are conveyed largely over the Internet" (Al-Obthani and Ameen, 2018; Haddad, Ameen, and Mukred, 2018).

Even though working from a superior level of responsiveness of pedagogic skills, staff in the area face two essential impediments in the acceptance of a more open learning culture. Firstly, the access of the Internet is

rapidly improving, but is still in general too weak and contradictory to allocate any dependence on the solutions of net-based learning (Rennie and Mason, 2007). Secondly, the educational culture is opposed to the appreciation of the value of the degrees of open-learning, with succeeding difficulties in re-designing the materials of the course for a more educationally supple, student-centered environment of learning.

The culture of Nepali education is governed by face-to-face teaching. It has a very long history starting from the culture of Gurukul system to the current formal schooling. The appearing processes or practices of utilizing technology and advancement in education have been fostering online learning as a type of distance education and attaining popularity. Online learning is regarded as one of the different methods or approaches to e-learning (electronic learning). E-learning is a broader idea of learning, which incorporates the utilization of all electronic ways for learning. On the other hand, online learning is to the Internet or Intranet arbitrated learning prospects (Pangeni, 2016). E-learning is defined as the “utilization of online media, ICT, and web technologies for culture of education”. One of the greatest definitions of e-learning can be: a word covering a broad set of processes and applications, like computer-based learning, web-based learning, digital collaboration and virtual classrooms. It incorporates the content delivery by means of Internet, audio- and videotape, intranet/extranet; interactive TV, satellite broadcast, CD-ROM, and so on (Ameen, Almulla, Ali, Al-shibami, and Ghosh, 2018). In Nepal, HEIs (higher education institutions) have begun employing online learning as e-learning primarily to assist the conventional on-campus learning and teaching activities. It is supposed that e-learning offers new and current opportunities to both the HEIs and the students by making latest and exciting opportunities.

3.2 Main ODL models

Pradhan (2008) stated about the distance education, an imparting educational method without a face to face interactions integrated in Nepal. But in recent years, face to face interactions are new and popular mode of education. The delivery of the distance education in Nepal, clearly assists the mode of delivery, depending on the subjects demands as well as the nature of each subjects. In Nepal, the distance education has two main persons like tutor and tutor counselor; here the tutor plays the part of facilitating the subjects whereas the tutor counselor is resource person who is locally available for supporting the students continuously (Bastola, Ameen, Chanda, and Duraisamy, 2017). In Nepal, the difficulties faced in distance education are the under development, poverty and landscape hindrance even after equal access for all people. The radio education program was the first launched distance education in Nepal by the college of education.

Rennie and Mason (2007) analyzed the development of distributed learning techniques conducted by many universities to design distance and distributed learning courses in Nepal and Bhutan. The distance and distributed learning have created higher awareness for pedagogic skills, but here the staffs face significant impediments for reaching the students adopting open culture in the process of learning. The firstly, negative aspect is the internet access in Nepal, which is mostly weak and inconsistent to make the net based learning program more difficult. Secondly, the resistant academic culture cannot be recognized properly due to the open learning degrees which make it very difficult to design the subject course material and flexibility in education.

Table 2. Types of distance education

Model	Examples of
Correspondence model	Print
Audio-based models	<ul style="list-style-type: none"> • Broadcast: IRI • Narrowcast: IAI (via audio tape or CDs) • Two-way radio • Audio conferencing and telephone • Broadcast radio
Televisual models	<ul style="list-style-type: none"> • Broadcast television (educational and instructional) • Videoconferencing • Video
Computer-based multimedia models	<ul style="list-style-type: none"> • Interactive video (disc and tape) • CD-ROMs • Digital videodiscs (DVDs/VCDs) • Interactive multimedia
Web-based models	<ul style="list-style-type: none"> • Computer-mediated communication • Internet-based access to World Wide Web resources • Online courses (e-learning) • Online conferences (webcasts and webinars) • Virtual classes/schools (cyber schools) and universities
Mobile models	<ul style="list-style-type: none"> • Hand-held devices • Portable media players (podcasting) • Cell phones and smart phones • Tablets • E-readers

Tara (2014) stated that the beginning of distance education for computer undeveloped country like Nepal is of great advantage and highly innovative. Even though the Open University Nepal is not materialized yet, the distance education offered has established the high carrier gain. The Distance Education for computers is known for its alternative model of education in Nepal, while the technological development is getting stronger for careering feasible network for teacher and learner in fixed place, fixed time, fixed person for training the learners. The Open University in Nepal has organized advanced computer-based education for rural Nepalese in department like health, productivity, economic improvement sustainability disciplines and social system.

Parajuli (2016) aims to research the mobile learning practice that has been integrated in Nepal for higher education, as mobile technology is playing the leading technological role for 15 years. The semi-urban as well as the rural undergraduate people can use the mobile education for their educational practices in Gorkha district of Nepal state. Even though mobile learning was not widely spread in Nepal, the uses of mobiles for educational purpose make the integration process more powerful and effective plan. Obviously, there are lots of significant distinctions between the e-learning and mobile learning as it has issues like small screen size, processing power and storage but mobile technology is trying to break these barriers. E-learning is known for its real time and self-paced learning but mobile learning is also known for its informal presentation, self-paced and un-tethered quality.

According to Wagley (2013) in Nepal, the Kathmandu university school of education offers e-learning environment for all its students. All the learning courses and the resources for learning each subject through the

mode of face to face interaction are provided through online. The Educational Content Management System for e-learning strategies provides all the possible features for learning and assisting for students as well as teachers. This system has the most improved technological platform called the Moodle school of education which is also being offered in the programs for distance learning through the web 2.0 technology. The course activities and supported email messages are offered through model platform. Thus, Nepal offers a completely interactive virtual learning through distance learning in Kathmandu University.

Bajarcharya (2014) investigated about the ten most important dimensions of the distance learning in the state of Nepal. The open and distance learning for higher education is in need of improvising the quality assurance while comparing with the traditional learning in the Nepalese context. The development of quality assurance by integrating the qualified open and distance education programs can bring greater standardized learning process. The face to face classes offered in open and distance learning has the most important characteristics like teacher and learner separation, mix media course ware use, institutional accreditation, face to face meetings and tutorials, two ways of communication and process of industrializing the learning courses. E- learning in Nepal also offers learning objectives, instructional strategies through online, asynchronous designed learning material, satisfying learner's demands etc.

CDEC (2009) expresses about the ODL program in south Asian countries like Bhutan, Pakistan, Nepal, Sri Lanka, etc, which has offered learners to practice various course programs by breaking the barriers like accessing, time, place, researching methodology, curriculum contents and combination of all these aspects. The organizational education program is the distance education which accredited wherever the teachers or learners are at any geographical place or time distance. ODL is known as a umbrella term for education which reaches all the learners from the educational institution or the tutors. In ODL, the student's advantages include, they can learn from remote or rural communities, migrant families, disabilities, poor parents, ethnic communities and even street children after disasters.

Pangeni (2016) briefly explains the cultural practices in Nepal being dominated by the face to face learning can be broken by the open and distance learning programs. The most emerging practices of e-learning all gaining its popularity, so promoting and integrating e-learning and distance learning program in country like Nepal can bring rural students to the world of virtual education. The thematic issues in Nepal are modes of education culture flexible learning, pedagogical tool of ODL for teachers' educations and implementing ODL in Nepal is the core focus for exploring. Many universities and open universities have acquired success in the implementation of ODL in this age of internet.

Kharkurel (n.d) explores the potentiality of e-learning in Nepal, as e-learning includes formal and informal learning programs through the electronic delivery. The learning tools like web based teaching and learning materials, CD-ROMs, educational animation and graphics and e- mail are included in this method. As Nepal is new to the role of developing country the e-learning seems to be new stranger. However, the Nepal's education system which usually relied on traditional learning has recently got out of tract to e-learning in the Nepalese cities. As Nepal wants to exploit the e-learning strategies, the Nepal government has given its importance to the information and communication technology to build a knowledge-based society for city dwellers and rural people.

Nepal policy (n.d) mentioned about the open and distance learning vision of Nepal, which is integrated in a full flow for the creating of opportunities for Nepal citizens. The ODL system expanded its full access in schools and higher educational institute for having a new and diversified learning program for children, working people, housewives and out of school students. Through ICT applications the open and distance learning gives the qualified education system similar to the traditional education by various delivery mechanisms offered in the several online courses. The ODL has created a conventional education system by expanding the access for

interested learners in groups, women, poor people, and marginalized citizens and so on. This ODL is known for its flexible learning due overcome of barriers like physical, geographical and time strategies.

Lodhia (2006) analyzed the e-learning programs offered in various countries for the welfare of the nations. Distance learning programs can offer valuable opportunities for adults who are working and for children who are basically poor or disable to go for traditional education system. The distance learning provides the dynamic career and qualified environment virtually from the database index, web indexing and book index (Bastola, Ameen, Younis, and Chanda, 2018a). The distance teaching has also offered tutorial classes with instructional designs with various programs for each course offered in a better teaching and learning methodology. The capacity of the developing Nepal countries works with the support of the government for enhancing their ICT for educating the country people (Bastola, Ameen, Chanda, and Duraisamy, 2017).

Acharya (2012) explains about the open and distance learning in the context of Nepal. Even though there is increase in popularity in the open and distance education in Nepal, there are also various challenges and prospects in it. In the industrial revolution the distance education concept started emerging. In account of Desmond Keegan, open and distance education made its way as an alternative model for the traditional education. The ODL has the main advantage of feasibility in learning and teaching with the innovation and creativity in the information and communication technological development. The separate teachers were trained to meet the learners need without the need of place, time or to meet particular person. The four stages of ODL undergone in Nepal were as follows: tele-learning model, multimedia model, interactive flexible learning model or Taylor model and flexible learning model. Western education system is mostly used in the ODL of Nepal.

4. Discussing

A brief discussion of the underlying principles behind distance learning is necessary to understand the associated problems. In 1973 Moore introduced the theory of independent study. As an important foundation of distance education, it suggests that successful teaching can take place even though teacher and learner are physically separated during the learning process. While this separation can occur in several ways depending on the nature of the course content and delivery medium, this paper will not differentiate between non-traditional, electronically mediated (i.e., real-time, computer network or video teleconferencing) and traditional coursework (i.e., correspondence courses) because many of the barriers exist within both types of distance education (Bastola and Ameen, 2017). Electronic mediated courses use telephone lines, cable, satellite, and microwave networks to transmit voice, video, and data.

Although distance learning is not new, it has not received respect in the academic community because of the number and seriousness of problems presented here. The dramatic growth of the adult learner population is making distance learning an increasingly popular choice of learning techniques. Further study of student demographics and motivators will help target the adult learner population and will help institutions develop course materials and techniques appropriately (Bastola, Ameen, Younis, and Chanda, 2018b). Scrutiny of the intrinsic problems in distance education will help overcome problems encountered by students and faculty. Understanding and mitigating technology problems are important, especially with the rapid expansion of technology. Further research into course development techniques will help learning institutions understand which methods work best in the distance learning classroom.

5. Conclusion and recommendation

The conclusions were reached to the vitality of conducting in deep research on the area of online learning and distance education which considered the main component of learner and teacher at the time of teaching, a mainstream of the process of instruction that content and instruction are conveyed largely over the Internet. It is important to fill the lack of studies that trying to solve the weakness of utilizing e-learning technology to improve the dependence on the solutions of net-based learning for enhancing integrating of e-learning and distance education in Nepal. The research exposed that it is vital to conduct in deep research to identify the underlying common factors of e-learning and distance education, policy/performance and beneficiaries satisfaction.

5.1 Suggestions

Also, it is worthy to examine the impact of e-learning and distance education on the beneficiaries satisfaction, the policy performance and beneficiaries satisfaction through policy/performance as mediator Factor. It vital to conduct to propose a model for e-learning and distance education in Nepal with attention to the influence of the quality of knowledge management. A research paradigm is explained as a structure of methods, standards and attitude inside which the investigators work, and the investigation work take place (Krauss, 2005). Research paradigms are of two broad categories. They are (1) Positivism and (2) Interpretive (Creswell, 2003).

These suggested researches must adopt mixed methodology. This research integrates both positivism and hermeneutics. Hermeneutics is a method in the research since the researcher has gathered descriptive data for analyzing the concern proposed in the research. That research also undergoes positivism since it examines a research hypothesis by analyzing the numerical data gathered from primary respondents. This research adopts *descriptive research* According to Thyer (2010), the descriptive research attempts to characterize the problem, situation, service, and phenomenon and offers information about the living conditions of a community or characterizes attitudes towards the problem. This research can be employed when the research object is very difficult. Also, it is employed in identifying the connection that exists among the variables. Grinnel and Unrau (2008), point out that descriptive design makes use of the elements of both quantitative and qualitative research strategies in the same research. The current research research is *descriptive* in nature because this research has both quantitative and qualitative analysis.

5.2 Conclusions

Based on an intensive literature review, this study strives to some valuable suggestions that stress on the strength of conducting more research in this area. The key intention of these researches is to explore in detail about integrating e-learning and distance education in Nepal. The conceptual framework for the integrated e-learning and distance education in Nepal Source. The aim of that research should be integrating E-learning and distance education in Nepal. The following section will briefly discuss about research paradigm, research design, types of data, sampling design, data analysis and interpretation techniques and explains ethical considerations in this research.

References

- Abdulrab, M., Zumrah, A. R., Almaamari, Q., Al-Tahitah, A. N., Isaac, O. and Ameen, A. (2018). The role of psychological empowerment as a mediating variable between perceived organizational support and organizational citizenship behaviour in Malaysian higher education institutions. *International Journal of Management and Human Science*, 2(3), 1-14.
- Acharya, K. (2012). Open and distance learning (ODL) in Nepal: prospects and challenges. *Interdisciplinary Thoughts*.
- Al-Obthani, F. and Ameen, A. (2018). Towards customized smart government quality model. *International Journal of Software Engineering & Applications*, 9(2), 41-50.
- Ameen, A. and Ahmad, K. (2013). A conceptual framework of financial information systems to reduce corruption. *Journal of Theoretical and Applied Information Technology*, 54(1).
- _____, Almulla, A., Maram, A., Al-Shibami, A. H. and Ghosh, A. (2018). The impact of knowledge sharing on managing organizational change within Abu Dhabi national oil organizations. *International Journal of Management and Human Science*, 2(3), 27-36.
- Bajarcharya, J. R. (2014). Ten dimensional quality assurance model for open and distance learning, mimeo.
- Bastola, P. and Ameen, A. (2017). Toward harnessing web-based technology in developing distance education in Nepal: reviewing the barriers and opportunities. In *18th international Conference on IT Applications and Management (ITAM)* (p. 32). Fudan University, Shanghai, China.
- _____, _____, Chanda, N. and Duraisamy, B. (2017). Proposing conceptual framework for enhancing integrating of e-learning and distance education in Nepal. *1st International Conference on Management and Human Science ICMHS 2017, (July), 2017*.
- _____, _____, Younis, D. and Chanda, N. (2018a). Investigating most suitable model for measuring acceptance mobile learning in modern international. In *19th International Conference on IT Applications and Management February* (p. 31). Danang, Vietnam.
- _____, _____, _____, and _____. (2018b). Identify theories and models of technology acceptance and information systems success for measuring open and distance learning in Nepal: literature review. In *20th international Conference on IT Applications and Management (ITAM 20)* (p. 2018). Hindai University, Osaka, Japan.
- Bertolucci, J. (2013). *Big Data Analytics: Descriptive vs. Predictive vs. Prescriptive*. Information Week.
- CDEC, (2009). *Open and Distance Learning for Basic Education in South Asia: Its Potential for Hard-to-Reach Children and Children in Conflict and Disaster Areas*. Kathmandu: UNICEF ROSA.
- Creswell, J. W. (2003). *Research Design: Qualitative, Quantitative, and Mixed Approaches*, Thousand Oaks, CA: Sage.
- Dahal, M. P. (2014). Distance education and open schools in the context of Nepal. *Distance Education*, 15(15), 56-62.
- Haddad, A., Ameen, A. and Mukred, M. (2018). The impact of intention of use on the success of big data adoption via organization readiness factor. *International Journal of Management and Human Science*, 2(1), 43-51.
- Isaac, O., Abdullah, Z., Ramayah, T. and Mutahar, A. M. (2017). Examining the relationship between overall quality, user satisfaction and internet usage: an integrated individual, technological, organizational and social perspective. *Asian Journal of Information Technology*, 16(1), 100-124.
- Kharkurel, A. (n.d). E-learning –exploring its potential in Nepal, mimeo.
- Krauss, S. E. (2005). Research paradigms and meaning making: a primer. *The Qualitative Report*, 10(4), 758-770.
- Lodhia, R. (2006). *Annotated Bibliography on e-Learning and Application of Educational Technology in African Countries, or in Contexts Relevant to Africa*. Carnegie corporation of New York.
- Nepal policy, (n.d). *Open and Distance Learning Policy Approved by Ministry of Education*, pp. 1-3.
- Pangeni, S. K. (2016). Open and distance learning: cultural practices in nepal. *European Journal of Open, Distance and E-learning*, 19(2), 32-45.
- Parajuli, K. P. (2016). Mobile learning practice in higher education in Nepal. *Open Praxis*, 8(1), 41-54.
- Pradhan, L. (2011). Distance education in Nepal. *1st International Technology, Education and Environment Conference, African Society for Scientific Research (ASSR)*, pp. 1-5.
- Rennie, F. and Mason, R. (2007). The development of distributed learning techniques in Bhutan and Nepal. *The*

- International Review of Research in Open and Distributed Learning*, 8(1).
- Tara, C. (2014). Distance educations for computers undeveloped country like in Nepal: prospects and challenges. *International Journal of Information and Education Technology*, 4(6), 463-467.
- Thyer, B. (2010). *The Handbook of Social Work Research Methods*. SAGE Publications, London.
- Wagley, M. and Jha, A. (2013). Country report: Nepal education in general and ICT in particular. *A paper presented in UNESCO, RDTC Seminar in October*.