

KNOU-UNESCO Cooperative Model for PCPD Region Development

Jinah Seol

Department of Media Arts & Sciences
Korea National Open University
Seoul, Korea

Abstract

This study aims to explore KNOU's potential for supporting international education programmes and to propose a cooperative model between KNOU and UNESCO for establishing an open and distance learning (ODL) system in the 'post conflict, post disaster' (PCPD) regions. Coupled with UNESCO's expertise in rehabilitation programmes, KNOU will be able to initiate an international ODL programme by transferring its experience and technical and media know-how to the respective developing countries. This study examines pedagogical usage of ICTs and a possible collaborative model among institutions in three phases: an introduction stage, a development stage, and a completion stage. To strategically effect an international cooperative model, four potential action plans by KNOU are suggested. First, KNOU and UNESCO should construct a team that will choose a PCPD country as a case study and consult specific strategies for the implementation of the KNOU model. Second, leadership seminars and training programmes should be developed concurrently. Third, networking and cooperative systems should be set up with local universities. And, finally, student exchange programmes and overseas volunteer programmes should be designed and operated. Utilization of its advanced and systematic DE cooperative model will allow KNOU, as one of the leading ODL institutions, to carry out a meaningful international cooperative venture with UNESCO.

Introduction

Education is one of the fundamental pillars of human rights, along with democracy and sustainable development. According to the UN Charter of the Universal Declaration of Human Rights (Article 26, paragraph 1), everyone has the right to education, and higher education shall be equally accessible to all on the basis of merit. Higher education especially has given



ample proof of its potential for change and progress in societies over the centuries. However, the gap between industrially developed, the developing and the less developed countries with regards to access to and resources for higher education and research has become enormous. Without adequate higher education and research institutions providing a critical mass of skilled and educated people, the least developed countries cannot reduce this gap¹.

Through knowledge-sharing and international cooperation based on advanced technologies, institutional partnerships can be the catalyst for reducing such gaps. UNESCO, as an organization for the betterment of the human race, has long been interested in open and distance education as a means of reducing the gap and providing solutions for some major educational issues such as ‘education for all (EFA)’ and ‘reaching the un-reached’ (Loing, 2011). Since the World Conference on Higher Education in October 1998 and the Dakar’s EFA declaration² in 2000, UNESCO has consistently called for increased open and distance learning (ODL) capacity and also devoted much effort to the actual implementation of ODL entities. The Organization has also aided in the efforts of its member-states and international NGOs (non-governmental organizations) as they strove to extend lifelong learning opportunities to people and to provide universal educational access to all.

As a prominent participant in UN’s post-conflict and post-disaster (PCPD) programmes, UNESCO — in education, science, culture and communication — has been contributing to the relief and reconstruction effort in PCPD situations. Closely coordinating with the overall United Nations system-wide response³ efforts in PCPD situations, UNESCO’s main focus is on human and institutional dimensions of relief, recovery and reconstruction, with specialized strengths in all levels of education.

There is an increasing recognition that people in conflict- and disaster-affected communities themselves place a very high priority on education for their children — a heavy emphasis on which often gives it priority over even immediate material needs. Under appropriate conditions of security, the provision of education can help to protect children and

¹ UNESCO (1998). World Declarations on Higher Education for the Twenty-First Century: Vision and Action, 9 October 1998, p. 2.

² In 2000, at Dakar, the global community committed itself to achieving education for ALL, including those affected by conflict and disaster.

³ UN system-wide reforms in post-conflict and post-disaster (PCPD) response have focused on coherence in filling gaps during the transition from humanitarian response to reconstruction and ‘peace-building.’

youths from recruitment into fighting forces, forced labour, prostitution, criminal activities and drug abuse (UNESCO, 2009). Consequently, in order to increase educational access and rebuild the systems in the PCPD regions, joint efforts by national governments and international entities, such as the DE institutions which can effectively address conflicts and disasters, are highly needed.

In 2013, UNESCO proffered a tentative proposal to the Korea National Open University (KNOU), asking it to consider a partnership in a collaborative educational project based on 'Korean style mass education model' which could implement an open and distance educational system in PCPD regions. There are two reasons why UNESCO may have singled out KNOU to join the PCPD redevelopment programme. The first is probably that, although Korea has undergone a post-conflict and post-disaster period following the war in the early 1950s, it has rapidly achieved economic success that was built on the foundations of education and a national redevelopment movement called 'Saemaul (New Neighbourhood).' The other reason is likely to have been based on the fact that KNOU, a leading higher distance education organization in Asia, has an ICTs-based multiple DE systems and curriculum methods which have fulfilled the needs of its various students and the society at large for the past 40 years in Korea. Also, KNOU's ODL model might be more attractive to the PCPD nation states than those of the West as it offers a more feasible, adaptive and 'alternative higher educational model' that takes advantage of both old and new media for tools in a relatively inexpensive set-up.

It is in this context that the paper tries to provide an overview of the functional approach of ICTs for open and distance learning, and discuss the impact of ICTs on open and distance learning. In addition, the paper constructs a collaborative model with working strategies between KNOU and UNESCO for the PCPD regions based on KNOU's know-how in ICTs implementation. Above all, this study clearly defines KNOU's key role for delivering ODL experiences and technical expertise to the PCPD regions and the strategy it must take to achieve a successful partnership with UNESCO in the near future.

Theoretical Framework: ICTs in Open and Distance Learning

In the past two decades, we have witnessed considerable growth in education worldwide. This unprecedented phenomenon can be attributed to the globalization of open and distance education through the application of information and communication technologies (ICTs). Advances in computer technologies and communications offer a plethora of opportunities to the

open and distance education systems — systems with the capacity to integrate and interact with each other over a wide geographic distance. The growth of communication and computer systems, their ease of use, their power and the diversity of information transfer allow teachers and students to have access to a world beyond the classroom (Majumdar, 2004). Further, the proliferation of modern ICTs calls for change in the demand for education and the approach to teaching and learning, as well as the delivery of education (Olusola & Alaba, 2011).

Open and distance learning (ODL) is defined by the Commonwealth of Learning as ‘a way of providing learning opportunities that is characterized by the separation of teacher and learner in time and/or place; learning that is certified in some way by an institution or agency; the use of a variety of media, including print and electronic; two-way communications that allow learners and tutors to interact; the possibility of occasional face-to-face meetings; and a specialized division of labor in the production and delivery of courses’ (The Commonwealth of Learning, 2002). In ODL systems where learners are remote from the institution and on a large scale, it has been difficult for an institution to provide various services to the learners at different phases of a student’s learning life cycle due to limited human resources. However, ICT, as a group of technologies, is becoming a prime tool for overcoming such limitations.

Olusola and Alaba (2011) argue that ICTs have provided a viable platform for the generation, adoption and exploitation of knowledge through open and distance education. They can give a boost to open and distance learning by supporting educational services at different phases of students’ learning life cycles which constitute admission, learning, evaluation and certification phases (Rao, 2010). UNDP states that ICTs are both traditional, such as radio and television, print and fax, and new media such as the Internet, the World Wide Web, electronic mail, teleconferencing, and virtual classrooms. ICTs are also electronic and non-electronic technologies, infrastructure systems, and services used to publish, store, retrieve, and transmit information, to communicate ideas, and to generate knowledge (Mejiuni & Obilade, 2006). According to the World Bank (2002), ICTs can also be defined as the convergence of activities which facilitates capturing, processing, transmission and display of information through digital electronic devices.

Recently, the rapid development of ICTs in open and distance learning and the shift from linear to hypermedia learning create new challenges in developing or underdeveloped countries. In particular, most countries in the PCPD areas have yet to be integrated into open and distance learning, much

less with the benefits of ICTs' utilization in education. Meijuni and Obilade (2006) maintain that poverty constraints and access affect the use of ICTs in open and distance learning in those countries. As such, a growing digital divide is actually leading to greater inequalities in development; those who are in dire need, such as disadvantaged groups, rural communities, the physically challenged, and the less privileged do not have access to the ICTs.

Meanwhile, ICTs in open and distance learning are much more than techniques and tools but can rather become a core component for implementing distance education in those countries. They have the potential to transform the nature and process of the ODL environment in a meaningful way. Specifically, the concepts of interactivity, flexibility and convenience of ICTs can be adopted and exploited in the pedagogy of open and distance learning. As ICT increases the possibilities, resources and tools for distance education, ODL needs to reconsider the pedagogy, relationship between students and knowledge, interaction between students and teachers, and collaboration among students (Cornu, 2006). Accordingly, knowing how to use and integrate ICTs in teaching and learning becomes more important to the teachers in their pedagogical roles in the underdeveloped ODL settings.

Although there has been increasing interest in the use of ICTs in education institutions in low-income countries, developing such ICT infrastructure and sustainable interventions are very difficult to achieve, especially in the PCPD countries. Of course, several countries have already attempted government-led initiatives to expand ICT access at schools in association with broader educational quality improvement agendas. However, there has been a lack of a concrete form of guidance regarding the stages of development needed to make efficient use of resources and maximize the chances of sustainable investments (Bass, 2010). In an investigation of the obstacles to greater use of ICTs in African schools, Kessy, Kaembe and Gachoka (2006) pointed out two main reasons: one was the lack of tangible resources, such as technology, money and power; and the other was human resource shortcomings with regard to awareness, competencies and governance. The first shortcoming especially points to the need for effective planning in order to make the best use of the few resources that can be brought to bear on education. Among other issues, it should be noted that education institutions' managers, teachers and senior academics in the developing countries often lack ICT planning and infrastructure implementation knowledge. Thus guidance on this could help to make effective use of scarce resources, develop human resources and cope with rapid technological change by focusing on key institutional objectives (Bass,

2010).

In effect, any ICT model requires the stages of development of an institution's ICT infrastructure to the organization's primary objectives. For instance, the ICT Maturity Model, which is unique in defining the ICT infrastructure resources levels, provides a developmental framework for education institutions in low-income countries. The Maturity Model was derived from documentary sources and analysis of selected schools, colleges and universities in Ethiopia. The model consists of eight levels, with the lowest levels defining the infrastructure required to enable initial computer training. The highest level applies to the institutions where e-research is widely practised across the curriculum (Bass, 2010). The model suggests that prioritizing capacity-building and infrastructure development initiatives could contribute to improving student learning opportunities. It also implies that any development model using ICTs for open and distance learning considers the stages of development of ICT infrastructures in education institutions of the respective countries.

In the light of ICTs' capacities and functions in ODL and the implications of the established model, this paper overviews UNESCO's educational support via ICTs in PCPD regions and then examines Gary E. Miller's (2011) distance education inter-institutional collaboration models in order to build a KNOU-UNESCO strategic cooperative model.

UNESCO's PCPD and Distance Education Collaboration Model

UNESCO's strategy in post-conflict and post-disaster situations is highlighted in its five operational strengths: education in emergencies and reconstruction; natural disaster risk reduction; culture and world heritage in emergency situations; media in conflict and post-conflict situations; and the promotion of gender equality in crisis situations. Among these five main themes, it is increasingly recognizing that education must be a principal part of emergency response for the long-term recovery.

Many governments in the PCPD regions have turned to distance education as a key vehicle to combat illiteracy and to help bring access to information to remote and damaged regions. UNESCO's technical assistance and advisory services not only provide urgent support to assess damages and losses of educational system, but also support national authorities, international partners, and professional and civil society organizations in longer-term sustainable reconstruction and peace-building institutions⁴.

⁴ <http://www.unesco.org/new/en/unesco/themes/pcpd/post-crisis-coordination-mechanism>

In the context of conflict and fragility, education can save and sustain lives, offering physical, cognitive and psychosocial protection when delivered in safe, neutral spaces. In addition, education helps to restore routines and gives people hope for the future, serving as a channel both for meeting other basic humanitarian needs and communicating vital messages that promote safety and well-being. Particularly, innovations in information and communications technologies (ICTs) have led to institutional partnerships for distance education. New innovations such as the Internet are stimulating global collaborations which have resulted in shared knowledge, the breaking of old boundaries and the creation of new ties among institutions.

Gary E. Miller (2011) suggests that there are four inter-institutional collaboration models that are emerging; (i) collaborations to share students; (ii) collaborations to share courses; (iii) collaborations to share materials; and (iv) collaborations to serve a mutual client. Although these models may seem that they are designed more for the ODL institutions of the developed or developing countries, some of them can be appropriate for applying to the international inter-institutional collaboration with regard to PCPD settings. The inter-institutional collaboration needs to be phased in over time. In the beginning, preliminary research is necessary for understanding PCPD's local settings and fund-raising capabilities. Also, an agreement should be made as to the selection of the recipient country and the extent of operational coverage in that region.

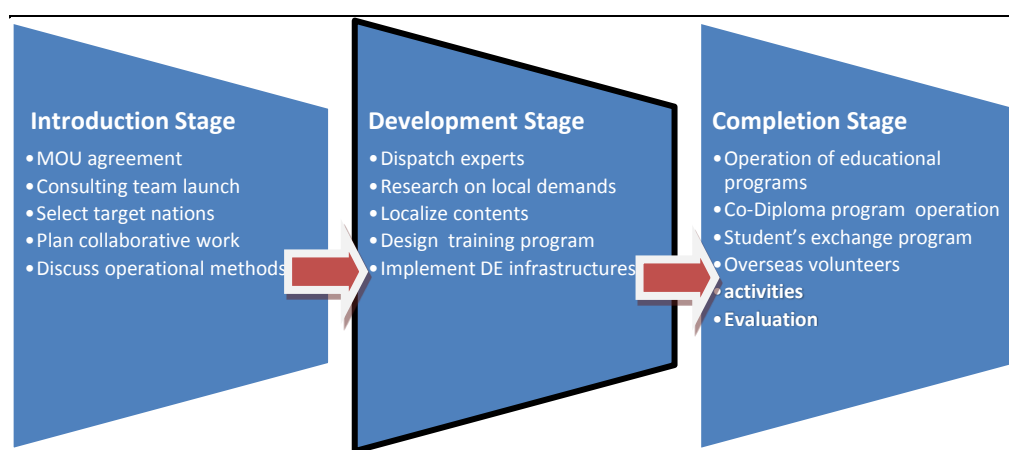


Figure 1 Phases of cooperation in the PCPD regions

During the development stage, ICT and ODL experts should be sent to the country with UNESCO advisors to implement and operate local distance education systems. Based on preliminary research on educational demands,

a consulting team will be temporarily stationed for making policies on distance higher education and lifelong education systems in the region. In addition, the localization of the educational curricula of universities, and the development of programme modules suitable for each media will be carried out. In this stage, emphasis should be placed on the training of educational leaders of the target nation to augment their existing capabilities. More specifically, the training programmes should be geared to include educational policy-makers, college/university faculties, and DE-related professionals.

In the last stage, it is necessary to check the efficacy of the new DE learning system — how well it is operating in the local settings and how well it is supporting the revitalization of higher distance education. In addition, various collaborative programmes such as an overseas volunteer programme and co-diploma programme may be developed in conjunction with other international entities. After the complete implementation of the DE system in the PCPD region, the collaborative effort should be evaluated via a full report. Based on these three phases, this paper attempts to build a workable UNESCO and KNOU cooperative model with specific strategies and four action plans.

Strategy for a UNESCO/KNOU Cooperation Model

In 2013, KNOU received a tentative proposal from UNESCO Paris for setting up a possible partnership on PCPD educational business based on a ‘Korean style mass-education model.’ KNOU has long been offering to the socially disadvantaged sector of the population distance higher education utilizing various multi-media, from print to mobile learning devices. Thus far, it has graduated more than half a million students, contributing greatly to Korea’s overall higher education completion rate. At present, there are approximately 170,000 students enrolled at KNOU.

KNOU’s strategy for the collaboration with UNESCO’s PCPD can be categorized into four action plans. First, a consulting operation for the adaptation and implementation of the KNOU model; second, leadership seminars and training programme operation; third, a networking and cooperative system set-up with local universities; and fourth, student exchange programme and overseas volunteer programme operations. Each action plan is elaborated more specifically below.

1. A consulting operation for the infrastructure set-up

The most feasible and realistic operation to be run by KNOU would be a

consulting operation to implement an ‘open and distance higher education system’ in the PCPD regions. Here, consulting operation does not mean solely delivering technical know-how, but includes planning the educational units as well as the management and support of human resources. It would be designed to fit the level of the respective nation’s technological development and educational needs and be in line with the diagnostic review of the local settings. KNOU has already undergone a consulting project with regard to the DE system in the Congo area⁵.

KNOU boasts many DE experts who have various international consulting experiences across regions of Africa, South America, Eurasia and South-eastern Asia. Their operational DE experiences would enable a feasibility research from the inception. In other words, a PCPD effort must begin with the diagnosis of the region’s educational needs and demands, and the type of educational system that has to be rebuilt. DE consulting work will also require dispatching experts to the region in order to supervise the smooth running of the transplanted ODL system. For example, experts from KNOU’s auxiliary organizations such as the Digital Media Centre, Institute of Distance Education or Information & Computer Centre can pass on their production techniques, operational skills and DE-related R&D experiences. Table1 indicates key resources that KNOU can offer to regions for cooperation with UNESCO’s PCPD programme.

Table 1 KNOU’s resources available for international cooperation

Affiliated organization	Collaboration Contents
DMC	<ul style="list-style-type: none"> • To consult on the infrastructure set-up of broadcast/web-based educational service • To develop broadcast/web-based contents • To advise on radio and TV production techniques
Prime College	<ul style="list-style-type: none"> • To plan overseas training programmes • To operate human resource development programmes
Institute of Distance Education	<ul style="list-style-type: none"> • Preliminary research on PCPD educational setting • To develop a PCPD DE model
Dept. of Education	<ul style="list-style-type: none"> • To consult open and distance education theory • To deliver teaching-learning methods

⁵ The project is called, ‘The Introduction of Customized Distance Education to Democratic Republic of the Congo’ and has an objective to develop and deliver systematic educational curricula and training materials to enhance Congo’s education development (Seol & Lee, 2013).

Dept. of Computer Science	<ul style="list-style-type: none"> • To design IT education and human resources development • To develop an IT personnel training programme
Dept. of Media Arts & Sciences	<ul style="list-style-type: none"> • To consult on broadcasting and multi-media production
Dept. of e-Learning	<ul style="list-style-type: none"> • To train e-learning experts and ICT professionals • To consult on an e-learning system for PCPD settings
Dept. of Agricultural Science	<ul style="list-style-type: none"> • To consult on agriculture and farming
Dept. of Environmental Health	<ul style="list-style-type: none"> • To consult on water quality management • To improve nutrition and health care
Dept. of Nursing	<ul style="list-style-type: none"> • To implement nursing practices • To train emergency nursing and family nursing

To implement an effective DE programme, it is necessary to develop a compatible consulting tool or package to suit the PCPD situation, containing all DE service solutions (content production methods, operational system, human resource development, and educational affairs operation, etc.), as well as training materials and quality assurance methods. These solutions can help any consultant to carry out his or her duties consistently, thus ensuring the validity and consistency of the project (Kim, 2012). Furthermore, consultation should include appropriate suggestions for an optimal educational set-up and media facilities that would support the DE system.

2. Leadership in seminars and training programme operations

Training programmes for policy-makers, educators and related workers must also happen concurrently for a successful DE operation. Without leadership seminars geared to educational authorities and actual training programmes for future DE participants, building an educational infrastructure itself would be a challenge. Networking, with and among the local people at the working level, is crucial for its success. Therefore, training programmes operation and social networking opportunities within the recipient country are highly encouraged. Information and insights gathered through such means from educational experts of the PCPD region would be highly valuable and likely deployable for running the training programmes with more success.

Most universities' human resource is managed on the basis of dispersed

organization networks, such as departments, faculties, academic personnel and technicians. When it comes to running a DE training programme in the PCPD, however, it would be ideal to customize its educational objectives and curriculum within a narrow band that is compatible with the participants' skill levels in their own languages. In this respect, KNOU and UNESCO need to discuss the selection standards of the training subjects, training period, and specific education contents. The training programme will vary depending on, for example, the educational themes such as media capacity, development of content, teaching method, technical skills, and content service management.

3. Networking with local universities in the PCPD

The educational priorities of UNESCO are also the priorities of KNOU. These are lifelong learning, access to education for the general public and the best training at the lowest cost. To promote these common goals, KNOU and UNESCO's potential collaboration can begin with the UNITWIN⁶ Programme. This programme serves as a prime means of building the capacities of higher education and research institutions through the exchange of knowledge, and sharing and promoting of North-South, South-South and triangular cooperation as a strategy to develop institutions (UNESCO, 2009). As the UNITWIN programme covers training, research and exchange of academics, and offers a platform for information-sharing in all fields within UNESCO, KNOU can submit a detailed PCPD project proposal to the Director-General of UNESCO.

Meanwhile, KNOU has already joined the e-ASEM and AAOU Fellowship Programme with other higher education institutions. E-ASEM is an e-learning network under the ASEM Education and Research Hub for Lifelong Learning, which promotes cooperation among Asian and European countries on ICT skills, e-learning and the culture of e-learning in lifelong learning. The aim of the e-ASEM network is to set up an online research network that allows ASEM university partners to continuously exchange ICT skills and e-learning-related academic and practical experiences⁷. KNOU has also played a key role in AAOU as a founding institution, a chair university, and an executive member. An important part of the AAOU effort, KNOU has been offering an AAOU Staff Exchange Programme since 2003. This programme was set up to promote the exchange of knowledge, experience and best practices among AAOU member institutions in a cost-effective way⁸. Although currently sharing of courses and students are

⁶ UNITWIN, the abbreviation for the university twinning and networking scheme was established in 1992.

⁷ <http://www.knou.ac.kr/engknou2/>

⁸ <http://www.aaou.net>

not enabled, the UNITWIN programme can still help KNOU to promote the potential cooperation in terms of co-research, credit exchange programmes and course sharing with local universities.

4. Student exchange programmes and overseas volunteer programmes

The Korean government, through its ODA (Official Development Assistance) arm KOICA, has made huge international contributions which are divided into bilateral aid and multilateral aid (see KOICA, 2010). KOICA has been operating several ODA businesses by grant-type aid. Its major focus has been on project-based development business, domestic invitational training, overseas volunteers and specialists dispatch, overseas emergency relief, and civil society organization activities. Although KOICA's projects cover various themes, dispatching volunteers overseas and the invitation of Asian and African trainees are highlighted and supported with large funding. UNESCO Korea's 'Sejong Project' has also supported educational training programmes in the Asia-Pacific regions (Pakistan, Laos, East-Timor and Philippines) and African countries such as Ethiopia and Uganda (Kim & Kim, 2013).

In collaboration with such institutions, KNOU will promote overseas volunteer efforts as well as student exchange programmes. Among PCPD nation states, there may be some university students interested in, and wishing to learn, Korean language and culture. Furthermore, some of them would want to study in Korea or to receive Korean diplomas or degrees through DE higher education.

With regard to volunteer programmes, KNOU has already established the 'KNOU Volunteer Organization' which helps the underprivileged population by contributing expertise and talent to the nation at large. Volunteers tend to have various educational backgrounds and rich social experience — they include medical experts, teachers, nurses, photographers, lawyers and computer engineers. Launching a new overseas volunteer programme will provide these same kinds of people with new learning opportunities for them to serve people in the PCPD regions as a global citizen. Along with UNESCO's PCPD programmes, KNOU volunteer and student exchange programmes will be able to play a crucial role in the domain of adult higher education.

Conclusion

The global phenomenon of open and distance learning educational systems has democratized knowledge, such that previously disadvantaged groups now have access to quality learning. This, in a way, can be attributed to the

emerging information communication technologies which have turned the globe into a global knowledge village (Olusola & Alaba, 2011). ICTs have also been stimulating global collaboration and cooperation in open and distance learning which has resulted in shared knowledge and the breaking of educational inequalities.

This study suggests that the cooperative model be taken in three developmental steps to effect the ODE collaboration model. First, KNOU and UNESCO should construct a team that will choose a PCPD country as a case study and discuss specific strategies for the operation. Second, KNOU should dispatch media experts and technicians, as well as DE specialists, to the country to research the specific needs and provide consultation to the local educators and policy-makers. Third, KNOU should support content production and academic management systems. Furthermore, it needs to develop networking and partnership programmes, such as co-education programmes for exchange students. Finally, in order to make this model succeed, KNOU should systematize its DE expertise by creating a manual to better transfer the experience and knowledge to the PCPD educators.

References

- Asian Association of Open Universities website. Retrieved from www.aaou.net
- Bass, J. M. (2010). A new ICT maturity model for education institutions in developing countries. *Development Informatics: Working paper series*, 1-40.
- Cornu, B. (2006). New media and open and distance learning: New challenges for education in a knowledge society. *Informatics in Education*, 6(1), 43-52.
- e-ASEM website. Retrieved from <http://easem.knou.ac.kr/>
- Kessy, D. Kaembe, M., & Gachoka, M. (2006). The reasons for underuse of ICT in Education in the context of Kenya, Tanzania and Zambia. *IEEE Fourth International Workshop on Technology of Education in Developing Countries*, 10-12, July at Iringa, Tanzania, 83-87.
- Kim, Y. (2012). A working paper on the international cooperation model for KNOU. Department of e-Learning, KNOU.
- Kim, H. & Kim, H. (2013). Sejong Project: Asia-Pacific literacy distribution

work.

Educational team, UNESCO Korea. Retrieved from <http://www.unesco.or.kr> KOICA (2010). Overseas aid statistics. Retrieved from <http://www.koica.go.kr>

Loing, B. (2005). UNESCO and ICDE: A global partnership for education. ICDE's Permanent Delegate at UNESCO, Paris. Retrieved from <http://www.icde.org/filestore/News/2004-2010/2005/UNESCOANDICDEReport04.pdf>

Majumdar, S. (2004). Modelling ICT development in education. Retrieved from http://www.unevoc.unesco.org/fileadmin/up/modelling_ict.pdf

Mejiuni, O., & Obilade, O. (2006). The dialectics of poverty, educational opportunities, and ICTs. In A. Ouaran & H. S. Bhola (Eds.), *Widening access to education as social justice* (pp.139-148), The Netherlands; Springer.

Miller, G. E. (2011). ICDE's role in ensuring quality in international inter-institutional collaborations. Policy Forum Presentation Paper. pdf.

Olusola, A. J. & Alaba, S. O. (2011). Globalization, information and communication technologies (ICTs) and open/distance learning in Nigeria: Trends, issues and solution. *Turkish Online Journal of Distance Education-TOJDE*, 12(3), July.

Rao A. M. M. (2010). ICT in open distance learning: Issues and challenges. *Proceedings of the Sixth Pan-Commonwealth Forum on Open Learning (PCF6)*, 202-203, Kochi, India, 24-28 November..

Seol, J. & Lee, H. (2013). A study on the international cooperation strategy between KNOU-UNESCO, Institute of Distance Education. The Commonwealth of Learning (2002). *An introduction to open and distance learning*. Retrieved from <http://www.col.org/ODL> Intro OLD. http://en.wikibooks.org/wiki/ICT_in_Education/Notes

UNESCO (1998). *World declarations on higher education for the twenty-first century: Vision and action*, 9 October.

UNESCO (2009). Guidelines and procedures for the UNITWIN/UNESCO Chairs Programme, Ed/HED/UNITWIN/2006/PI/1 rev.4, UNESCO, 2009.

UNESCO Korea Sejong Project. Retrieved from
http://www.unescoco.or.kr/news_center/sub_01_view.asp

UNESCO website. Retrieved from
<http://www.unesco.org/new/en/unesco/themes/pcpd/>

United Nations Development Program (UNDP) (2002). Information, communication and knowledge-sharing, Gender in development. *Learning and Information Pack*, UNDP, New York. Retrieved from
<http://www.undp.org/gender/infopack.htm>

World Bank (2002). *Monitoring and evaluation: Some tools, methods and approaches*.

Washington DC: World Bank Group. Retrieved from
<http://www.worldbank.org/oed/ecd>.