# E-Learning – A Proposed Model to Meet the Millennium Development Goal-2

Herani, Gobind M.

Khadim Ali Shah Bukhari Institute of Technology

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Gobind M Herani[1*]

## ABSTRACT

This paper reviews the literature and proposes a latest fastest and cheaper ways of imparting universal quality education at primary school level in developing countries. Literature review shows that blending of e-tools in present way of learning is helpful in improving the standard of education at national and international level. At present time, different ways of learning are available in the world, like: virtual universities, distant education, privately appearing in examinations, online papers etc. According to MDGs report, *Goal 2 is: Achieve Universal Primary Education:* Ensure that all the boys and girls complete primary school by 2015. It is found that the education and training systems of all the nations make vulnerable the future of millions of the children and of the nation itself. In developing countries villages where schools are available, enrolments are there, in spite of that there is no productivity because there something is lacking in teachers and society. Efforts made by government and donors agencies are encouraging but not enough; it is also found that with available resources by proper innovation and blending with information technology productivity can be improved, so for this a model is proposed , which will be helpful to meet the MDG-2.

JEL. Classification: **I21; I23; I38**

**Keywords:** e-Learning; Universal Education; Innovative; MDG-2; Information Technology

## 1. INTRODUCTION

It is reported by different researchers and case studies that in developing countries there is shortage of teachers and building facilities. But recent studies show that enrolment has increased with reforms in education with the intervention of UNO to meet the MDG-2. It is observed that in developing countries quality of education is very low. Teachers are not up to standard; as this is age of information technology and at tertiary level of education it has proved its importance significantly. It is easy for teachers and students to update them according to international standard.

According to latest figures of One World.net (2009) July report, Global population is 6.8 billion and rising each year by 78 millions. This population has doubled since 1965 and projected to rise 9.1 billion in 2050. By 2050, India (1.7 billion) will have overtaken China (1.4 billion) and together both these countries will account for over a third of Global population. In Africa increase rate will be largest and numbers will be double (2.0 billion). The current global picture of 49 least developed countries (LDCs) shows that 40 percent population is of under the age of 15 years; in contrast developed countries have more population over the age of 60 than in this young group.

Continent wise Population of the world is as under: Asia accounts for over 60 percent (3.8 billion) [ India and China together has about 40 percent population of the world]; Africa 14 percent (1 billion); Europe 11 percent (731million), North America 8 percent (514 Million), South America 5.3 percent (371 million) and Australia 0.3 percent (21 million).

As the literacy rate in developed countries is high and  low in LDCs; to improve this rate in these countries MDGs are set; they are eight in number and out of them *Goal 2 is: Achieve Universal Primary Education:* Ensure that all the boys and girls complete primary school by 2015.

For this purpose so many education reforms are under taken which have shown improvement in LDCs but this improvement is not at required level. Human development depends upon education which is the beginning of economic growth. The main aim of wealth is to develop people's lives, to expand people's choices and to facilitate every citizen, every child, every woman and every man to attain her or his full potential. Human capital refers to the stock of productive skills and technical knowledge embodied in country's population. A well-educated, ground-breaking and skillful population is the base as well as the goal of development. It is also the positive way to wipe out poverty. The education and training systems of all the nations make vulnerable the future of millions of children and of the nation itself.

After taking reforms, it is observed that in 2015 it is impossible to ensure that all the boys and girls will complete primary education. It is also known that in LDCs skilled human resources are lacking to carry this task. To keep this drawback in mind it is thought that there should be a latest and fastest method for educating these children by formal or informal ways.  For this sake e-learning is selected for current study.

This is the only source which can perform dual function , on one side it will help the teachers to keep them update with little struggle and student will also get  benefit of it if it is designed in proposed methods; at the same time parents will be motivated easily towards education without disturbing their routine use of their children.

This study has main question: Can e-learning meet the MDG-2 in LDCs.
It has following specific questions:
i.          Is it possible that all children will be enrolled?
ii.         Is it possible that children in LDCs will take interest at primary level?
iii.        Will children learn from this method an education of international standard?
iv.        Will teachers benefit from these methods?
v.         Will parents be interested to enroll their children if they are benefiting by this system at their home without disturbing their routine work?

This study is based upon literature review and proposed model.  Organization of current study is as below: section two details literature review. Section three presents proposed model. Section four concludes the study.

## 2. LITERATURE REVIEW

It is observed that high expenditure is done on higher education and low expenditure is done at primary and secondary level. Higher education responds in high returns in economic growth rate and secondary education at low rate and primary is not resulting at that level but after years it gives benefits in economics point of view.  When this education is not costly then why it is not spread because of lack of interest of parents, government policies and also lack of resources.

Different ways of learning are available at present time in the world, like virtual universities, distant education, privately, appearing in examinations, online papers etc. e-learning is the cheapest way of getting education in LDCs.

E. learning is a specific level of learning experience with in the domain of educational technology and finally usable in or out side of the class room (Pudaruth and  Mantaye 1988; WEF 2008). Few example of e-learning are distant learning, computer based trainings and social networking tool. Internet is becoming an increasing vital tool in our society and industry. Allover world educational institutions are providing online facilities because students are accepting online education (Vega,  McAnally-Salas and  Gilles 2008).

At present, the e learning is commonly used but its output is not properly analyzed. Some people are in favor and some in against of such learning and the arguments given are also valid but in spite of all these importance cannot be ignored.

Etherington (2008) has pointed out that e-learning in primary school at Australia is being done and policy initiatives are taken on promoting teaching and learning in schools, with a huge investment in information and communication technology (ICT) especially with computers.  Students are encouraged to use computers and required to use software prepared by educationists.

Chen, Lin and Kinshuk (2004 ) noted that e-learning is immediately embraced as positive step towards flexibility, adaptability, improving performance, learning speed, interactivity, finally enabling learners to be more self-sufficient. Consequently there is an extensive and unverified belief that e-learning will prove to be the medium for greater learner control and interactive experiences for students.

Some softwares are available at this time on internet and access is free of cost; such type of learning if assisted with teacher will help students to get quality education (www.elearningforkids.org/)

E-learning is divided into two categories: synchronous and asynchronous.
synchronous e-learning try to be like  a classroom , which involves classes taking place in real time and connecting instructors and students via streaming  audio or video or through a chat room.

Asynchronous e-learning allows students' entrée pre-packaged software on their own time, running at their own speed and communicating with a cyber–instructor or even other students through e-mail. Asynchronous e-learning is reflected by school students' use of the web; practices, which involve students connecting to and downloading information. Number of asynchronous e-learning programs offered in primary school curriculum has increased significantly, due to the ease in purchasing customized e-learning–programs which are fit in their curriculum needs. Reason of its popularity is that these programs are cost efficient, user friendly, flexible, modified and most important (Etherington 2008).

There is indeed high expectation and promise for computer technology. Supporters of Australian Government in favor of computers technology, e-learning and the world wide generally expect an increasing

trend in learning speed; technological transformation mediated human interactions (Steel cited in Cole, 2000).

In developing countries standard of education is not high especially in government schools, where real poor are getting education. But due to intervention of donor agencies committed for promotion of education enrolment has increased. Recent past reforms in the LDCs has improved the enrolment in the results of funding agencies. Three recent reforms in Bangladesh have extensive effects on the country's development and consequently much growth was encouraged in human capital; these are BRAC primary schools, Female secondary schools stipend, and food for education. Enrolment in particular at both the primary and secondary level, has seen real growth since these programs have been introduced (Nardella 2009).  In Pakistan, also enrolment has increased in response of recent reforms.

In developing regions, net enrolment in primary education reached 88 percent in 2007, from 83 percent in 2000 (www.allacadmic.com). Poverty can be reduced by giving universal education. Decades struggle of donors and governments of many LDCs has got results and school enrolment to a great extent increased among poorest children, specially girls and educationally underprivileged groups. Significant numbers of these children are attending schools as a record of history. In south Asia round about 30 million and in sub-Saharan Africa 20 million new students have got enrolled in educational system. The education standard is not good and increase in attendance has created its own problem. The shortage of trained teachers, classrooms and other facilities are sensitive.  For example in sub-Saharan Africa student teacher student is 47 to 1 as compared to 17 to 1 in developed countries (www.hewlett.org/).

It is common observation that in villages of developing countries illiterate people learn long of stories traditional tales, songs and they have leisure time in that they sit in groups of their tribes and entertain themselves. It is also observed that they enjoy playing new songs by recorders and record the songs, which are sung by traditional singers.

## 3. PROPOSED MODEL

From the detailed literature review it is found that lot of struggles are being done but still to meet the MDG-2 is very difficult.  Therefore, to combat this drawback a new model for elementary and secondary education is proposed. This model blends information system with modern techniques of teaching.

 In this model it is suggested that in every school starting from pre-primary to secondary for every class a computer at least Pentium–III with one USB consisting on audio-visual material within it related to syllabus universally designed be given. A kit of books also should be with it with translation in local language at primary level. Medium of language for at least three subjects, science, social studies and mathematics be English along with English language as a subject. A generator on biogas/natural gas/solar/ wind energy based be given to every school where electricity is not available. A small unit of said energy based is made available to every school. This material will facilitate school in meeting the target of goal-2 of MDGs; same syllabus be made available on TV channel in the cartoon format at universal level and also on radio channels too.

 Same benefit can be got by only using USB, a loud speaker and a player, which is the cheapest way to educate children with universal education in villages of developing countries. This model will give the universal education which will be accent wise and material wise universal. Every child will be able to recognized speaking of everybody in the world.

Programs easily available on internet and freely downloadable on CD, USP, MP3 and MP5 be made available easily so everybody interested to learn be able to study and get benefit of it which will help in class room and also at home and everywhere where people sit in gathering and entertain each other. So without going school one can learn a lot this will help people at least at some extent and it will be the source of encouragement for students, children out of class, and those who have not got admission in schools and parent who are illiterate do not send their children in schools.

## 4. CONCLUSION

From the detailed study, it is concluded from literature review that e-learning is good source of learning. It facilitates the students, children and their parents with latest and cheapest technology. Some countries have encouraged e-learning in their countries; one example of these countries is Australia, which has introduced computer from very beginning of primary schools.  Some web-based programs are also available and benefit can be taken from that wherever it has not been introduced. On some channels, cartons are also working as a source of e-learning.  As this is the nature of children, they like audiovisual programs specially based on cartons.

It is concluded from proposed model that this model is feasible and if programs of education are designed with international standard and made available easily on internet and cost free accessible then MDG-2 can be achieved till 2015. All the programs if they are available at some known TV channels, then parents also will allow children to sit at these channels.

It is also found that donor agencies and governments have introduced some incentives, like stipend, free education, introduction of food at schools and some such types of encouraging steps will help to achieve this target.  If programs are downloadable in CD, USP, MP3 and MP5 then also it will help students, teachers and parents and at least at some extent it will help to teach those children who are not enrolled in schools and wanted to study but due to any reason were not able to continue their education.

Finally it concluded that e-learning supported with proposed model and encouraged by donors agencies just like mentioned reforms in this study will achieve the targets and answers of set questions will be positive.

It shows that if educational programs in USP, MP3 and MP5 are available for them then they will use these facilities and in this way those children which are not attending classes due to any reason will learn something and this activity will set their minds diverted towards education and when they will appear in test of class admission and will be admitted in school. Those who will not enroll themselves will be able to understand and read at some level. At the same time society people will be able to know and understand at some level. Those who will have left the schools will be able to update themselves and chances are that after some time they will be able to rejoin the school.

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