The Training of Teachers to fit their Changing Role

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Abstract:

With new concepts in education like life long education, learning society and education for all on the one hand and a trend towards globalisation on the other hand, modern electronic media has already become an influencing agent in the realization of above concepts.

In this scenario – "on-line learning and teaching" is effective in moving towards ideal achievements in education. The need is to provide such opportunities for both learner and teacher throughout the world. In this respect a big gap exists between the developed countries and the developing countries. Developed countries are in a position to demonstrate the benefits and effectiveness of on-line learning and teaching where as developing countries have to struggle to achieve such benefits. The objective of "poster 1" is to illustrate this situation. The gap is widened due to many factors. Such as Lack of training and educational facilities for teachers, Lack of access to electronic media and hands on experience. Preparation of learning material itself is challenging. In this respect the transfer is not that easy and smooth.

There are certain obstacles and issues that are illustrated in the poster 2. These exist at a global level irrespective of differences among developed and developing nations.

Introduction

Even before the advent of high tech media and IT, the conventional idea of "teacher" and "teaching" was becoming rather outdated, and being replaced by such terms as "facilitator" and including roles like tutor and counsellor. The reason for such a change was the explosion of knowledge where it was not humanly possible to pass on all the knowledge to the learner by means of teaching alone. Students were expected to move on to "learning to learn" and "self learning" methods rather than learning from teacher. With the development of distance learning modes and open learning concepts where self learning was the major characteristic, it became very necessary to develop multimedia approaches to make self learning more effective. Several of these approaches are radio, TV, Internet and WWW and also other expensive media such as teleconferencing etc.

Concepts like "life long education" and "learning society" would not make sense in communities where self-learning opportunities are not made freely available. In the last two decades of the 20th century and the dawn of the 21st century, computers, information technology, and information networks reached the developing countries and began to make an over whelming impact on learning and teaching. Learners from more affluent families were well equipped with such facilities as computers and Internet communications; whilst a vast majority of average teachers in the developing world were not so fortunate enough to have access to such facilities.

Yawning Gap

The scenario in the developed world was so impressive and wonderful due to the availability of interactive video, e-mail, "e-chatting", Internet, satellite communication, tele-conferencing etc. Learners and teachers from far off places could be brought closer together for teaching and learning purposes. There was no more need to travel long distances, undergo traffic congestion and waste time. Home study, home tutoring, Tele-work were freely enjoyed by them.

The scenario in the developing world is totally different. Apart from resource constrains they are tied down with deep-rooted attitudinal and value constraints. The younger generations however are more interested in gaining access to new technologies while most of the adult generations including teachers are rather indifferent to getting familiar with the new system. Even if they can afford to, they do not make any effort to do so. Some have a fear that IT might infringe into culture and spoil the younger people. For example there are many sites of explicit obscenity available for the web browser. The easy accessibility deteriorates the social and cultural values of the younger generation.

Never the less the need is felt more in developing countries where poverty, difficult terrain, long travel, overlapping of work and study times and many other obstacles to continuing learning, exists. "On line" teaching and learning if made available was seen as a miraculous solution to overcome such problems.

If the developing countries can provide such facilities to the learner the effects could be of great magnitude in the field of education. A good example of a developed nation using such methods of distance education modes is Australia, which uses radio and the World Wide Web etc. to reach students in it's vast terrains far from an educational institute.

However there are two main obstacles to achieving such facilities. One is provision of equipment, facilities and infrastructures. The other is the training of teaching staff. The revolutionary changes in the teaching learning circumstances and availability of facilities to learners is only a dreamland for a vast majority in the developing region.

For some of those who are in dire need of learning opportunities even the radio is not available, Even if the radio was available electricity is unavailable. For some teachers in outstation and underdeveloped rural areas, even the chalkboard and a piece of chalk are not made freely available. But the cry is that we are moving towards an era of super high way in media technology. Let us examine this observation.

"The substantial investment in hardware, infrastructure, software and content... will be largely wasted if...teachers are not provided with the preparation and support they need to effectively integrate information technologies into their teaching."

(Benton Foundation Education Week, July 1997)

We have certain oft-quoted precious concepts in education that we desire to practice. One such is equality of educational opportunities and equity as a human right. We make various efforts to reach these ideal goals. How to provide equal opportunities to those who are geographically compartmentalized and out of reach in many respects like telecommunication and transport etc. because consequently human resource cannot be provided to those places. Teachers from affluent regions never reach such places. Even if some one happens to reach such a place they will make every effort to get back. We can take many such examples from South Asian region where newly appointed teachers serving in the rural areas serve only the required period and transfer back to city schools. It is a very rare occurrence to find a teacher to the contrary.

There are schools with fewer children for different grades. So that the number of teachers to be provided may be one or two. They have no other option but multi-grade teaching. The next question is - do they have infrastructure for multi-grade teaching? One teacher can manage effectively a multi-grade class provided some basic electronic equipment could be made available for appropriate use like overhead projectors etc.

Do the teachers in these remote areas receive any training in handling such equipments? Even if the equipment and training is available, do they have other facilities like electricity and maintenance know-how? Teachers need training in all these aspects.

In the case of Sri Lanka the subject of Educational Technology was introduced to teacher educational programmes during the year 1999. But the status of implementation differs from college to college. Sometimes computers are used but in isolation. When it comes to schools it is but a few handful of schools in large towns that have computer laboratories. Net working is not available. Even among universities networking is not effectively implemented.

India has stepped in to satellite communication. But India too has unreachable pockets of population, that are isolated due to geographical as well as economical restraints, even though it has produced software developers to compete with American expertise.

On line teaching and learning is a heavenly gift, only if it is made available to those who are in dire need. But the situation in most of the regions in the developing world is that distribution of such facilities has created a wider gap between the privileged and the disadvantaged groups. It has also created a very competitive environment in the society- a virtual rat race!

Changing Role of Teacher

In order to effectively implement on line teaching and learning, the infra-structure have to be provided and maintained whilst both teachers and learners too are made aware of how to access, how to use and how to make the best out of provisions. To give that awareness to learners, the teachers need training. For a teacher entering the profession in the new millennium introduction to Information Technology (IT) has become a must. A teacher is considered as a rich source of knowledge and agent of inspiration to the rest of the community. On line teaching has to begin with the teacher and teacher training

In order to achieve these cherished objectives, teacher training and teacher education need to face revolutionary changes. This revolution has to take place gradually but steadily. Such a revolution will not then disturb the smooth transition in the society.

What are the barriers to on line teacher training? The under mentioned are the basics. However if these are properly handled they can be implemented even under challenging circumstances.

- 1. Economic barriers Provision of equipments
- 2. Decision making Policy matters
- 3. Sustainability Do we have enough expertise in the respective regions
- 4. Attitudinal barriers Among teachers and teacher educators
- 5. Commitment Can we make the best out of it
- 6. Competition with the commercial world in using broadcast media and Internet
- 7. Can countries afford to have networking mainly for the purpose of education and training?

This paper is not intended to discuss all the barriers shown above, other than very basics relevant for the theme and which are highlighted in the two posters.

Need for Change of Attitude

Starting from the top policy making levels, a change in attitudes is urgently necessary to accept modern media as a useful tool in teaching and learning

This change can be brought to teachers during their initial training by introducing media not only as a subject but also as a training mode so that benefits could be practically demonstrated. In other words training and education itself can be delivered by using media such as radio, TV and interaction with the World Wide Web. Tutorials and assignments could be designed in such ways that teachers would be encouraged to use the above media and gain experience.

It is not only initial training but also updating, and continuing programmes are needed to cope with the fast spread of developments in IT.

Care has to be taken to use media to achieve the effectiveness of learning, and not to be lost in a wonderland of latest media attractions. The ability to select and use is therefore very essential.

Save the Learner

Even if ideal situations of availability of facilities are achieved, learners including teachers have to face other hazards, some of which are prominent and some of which come in disguise. There is competition and rivalry among Hardware manufactures, Software syndications & Service providers who are the middlemen in the commercial market. Quality of production, reliability of vendors and service providers has become questionable and are threatening to users. The best example is the pirating of various software products and other educational contents such as encyclopaedia.

Industry Standards

What are Industry Standards? Who will implement them? Is it practicable? Why then do software related problems succeed in destroying the interest of the poor learner? At the end who gets penalized? These are some of the existing very critical questions that are most often ignored. There is no alternative solution to avoid such difficulties other than taking precautionary measures, which in turn means, the need for more money/capital for the learner. The same example of pirating educational content can be illustrated. The market for pirated media opened due to the very fact that in most developing countries standardised or original versions of such content is unaffordable to the poor learner.

The danger is that learners become victims of this "unseen network" among the above-mentioned groups. For an example, a computer virus can do a lot of harm to computer software and even hardware of users, but it should be questioned as to who is ultimately benefited from such developments? How can we give a red signal to the learner? Will the learner get discouraged and develop an aversive attitude to the whole scope of new technology? Will they get stranded half way through?

How to save the learner is becoming a global problem. And finding answers will require a great deal of research and commitment, but it is unquestionably an issue that we must address as educators.

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