



Educational Podcasting: Learning from the fourth screen

Prof. M. M. Pant

Educational Podcasting: Learning from the fourth screen The term 'podcast' has now become quite popular. Created as a coined word from ipod and broadcasting, and propelled by the hugely successful ipod in its various incarnations, it has taken the youth by storm all over the world. However the term podcasting is used in a more generic sense to connote sending audio and sometimes pictures as well as video to hand-held devices, much like the term Xeroxing is used as an all encompassing term to mean photocopying, whether done on an HP machine or a Canon or a Ricoh. Almost all other companies in this space are creating competing products, with Sony's walkman and cellphone companies creating smartphone devices which would do the basic podcast receiving function in addition to the usual talk function. It is expected that by the year 2010 the number of persons using such devices will be in hundreds of millions, and would basically become a global youth icon. The small screen hand-held is now recognized as the fourth screen. The first

screen was obviously the Cinema screen, on which we watched our movies in earlier years, and occasionally still do so. The second is the television screen, now available in a large range of sizes from small to the very large plasma and LCD screens. The third screen is rather recent in the form of Computer monitors and now the ubiquitous laptop. And finally the fourth screen is that of the cellphones, pocket PC's, PDA's, 'ipods' etc. As we can see all these co-exist.

While the major discussion around podcasting, and its earlier textual manifestation of blogging, is in terms of the effect it would have on the mainstream media, and the concerns over piracy of musical materials, an important beneficial side-effect is the potential of using podcasting as a tool for education and creating a completely new form of engagement between the learner and the teacher. It would become the most important agent in the goal of universalisation of access to education, and also to reaching out to the visually challenged.

The word podcasting is linked to Adam Curry, who is seen as the founder of this mode

of communication, and over the last couple of years, podcasting has grown at a phenomenal pace. One of the nicest places to get a flavour of the podcast experience is to visit <http://podcasts.yahoo.com> and follow the links to know all about podcasting and to listen to a few podcasts as well.

Not surprisingly, Apple has spent considerable effort and resources to bring educational podcasting to the youth, more specifically the users of ipods. But this has led to the emergence of significant research literature on how to effectively use podcasts for educational purposes.

That India is a keen believer in the use of such emerging technologies, and endorses the philosophy that they can lead to solving some of the great educational challenges before us is seen clearly by the huge amount of money it spent on launching a satellite dedicated exclusively for educational purposes, even without a fully developed understanding in operational and quantitative terms of its utility. For the first six months or so the effective utilization would have in fact been a very meager percentage of



its potential.

It is therefore a great opportunity that the launch of the video ipods on 12th October 2005, provides for deploying a great technology for empowering the individual teacher to be able to send his audio or audio-video to any student in any part of the world, and for any learner to receive it on a hand held, which he may own or share. The EDUSAT is still in the captive hands of a few Governmental agencies, while podcasting is like the charkha of the 'knowledge economy'. The Mahatma would have surely loved it, and encouraged every educated person to make a podcast a day. Maybe he would have formulated "A podcast a day keeps ignorance away".

To know what the rest of the world has achieved in educational podcasting, all that

you have to do is to type in "educational podcasting" in the Google search engine and you will instantly see a whole lot of links to such efforts. You can choose the ones that look interesting to you, and explore further. I do not wish to overwhelm the reader with loads of information of what has been done elsewhere in the world. Rather I will draw attention to what is happening and can be done in India.

Many reputed schools are now thinking of getting their students to acquire an ipod or similar device. This is in sharp contrast to the scene earlier in the year, when school and college managements were busy confiscating cell-phones if brought on campus. There is also a movement at mobilizing teachers to start contributing their own podcasts. For this, the interested teachers would be

trained into script writing for the purpose, and their audio-recording or video-recording would be carried either in a properly designed "podcast studio" being set up for this purpose comprising 100% digital state of the art audio and video-recording equipment, editing software, software to convert these files to appropriate formats and to upload them on adequately powered servers with the requisite software so that they can be podcast, using RSS, the rapid syndication systems to the rest of the world by specially trained podcasting professionals. The teachers themselves would be the subject matter and teaching pedagogy experts that they already are. However they will be oriented towards core concepts of 'podagogy', to build upon the pedagogy or andragogy, that they may already be aware of. One of the core principles of

'podagogy' is to impart all learning in small chunks, rather than through long monolithic lectures. Thus while all classroom lectures are of an average duration of one hour, and not infrequently of 90 minutes and so are the EDUSAT transmissions, by contrast 'podcasts' are of short and small time duration. Typically of one minute duration they could be of three to five minutes duration sometimes, with the upper limit being about 8 minutes. Only in the rarest of rare cases should they reach 10 minutes. This is based on the research on the span of attention when engaging with such media. This is also quite aligned to the framework of re-usable learning objects (RLO's) and Learning Objects Repositories (LOR's) that are now being built by global co-operation. Podcasts may become the latest variations of learning objects, adding on to earlier practices of Java applets, and webquests.

The advent of podcasts at this time seems so opportune. The NCERT has just now released its syllabus under the new National Curriculum Framework with the philosophy of reducing the burden on students and making the teaching of Mathematics, Science, Social Science and languages more interesting and activity based. Use of these emerging technologies like blogging and podcasting could create tremendous benefits in terms of both the learning experience and the learning outcomes. In tune with the NCERT's launch schedule, we propose to make the podcasts to support the learners available according to the following schedule:



- From April 2006 for Classes I,III,VI,IX and XI
- From April 2007 for Classes II,IV,VII,X and XII
- From April 2008 for Classes V and VII

To prepare the stage for the above, we are proposing to launch some general interest podcasts under the following themes by the end of this year.

The first five themes (listed in alphabetical order) would be :

- IELTS Preparation Tips
- Improving Scholastic achievement
- International Education Systems
- Prospering Through Knowledge
- Right to Information, and shortly to follow (again in alphabetical order) would be the next five:
- After 10+2 what?
- CAT preparation guidance
- Introduction to French
- Learning to e-learn
- Professional Teacher Development

The above thoughts have been mentioned to convey the fact that the method of 'podcasting' has real practical applications. Coupled with the

use of blogging it provides a means of empowerment of the teacher as never before. Allowing a teacher to go beyond the traditional publishers and broadcasters, it now virtually allows any teacher who has anything worthwhile to tell her students to be able to do so with very little barriers of costs or technologies. Yes, a bit of motivation and commitment are required. I am sure upon reading this article, readers will come up with their own ideas for useful podcasts.

At this point it is useful to remind ourselves, that the use of audio in education, actually predates the emergence of the world-wide web by several decades. Audi-cassettes and audi-books have been used successfully before. But the high one-time production costs and the huge margins extorted by distributors meant that relatively few could be produced. That has been reduced now, practically to zero, if you can learn all the skills or just seek out someone who will help you in doing it. We are of course always willing to help. So, if you have an idea that you want to use podcasting for, you do not have to wait any further.