TV is dead - Long Live the WEB

Kroto, Harold (1996 Nobel Laureate)

Science, Engineering and Technology are as vital to our intellectual and cultural development (particularly our children's) as they are to our training to get along in the Modern World. Some efforts to redress the problems involved in the general Public awareness and understanding of science and Engineering (PAUSE) issues are being initiated via the Vega Science Trust (www.vega.org.uk), which aims to take advantage of the revolution in TV and Internet communications technology to improve matters. The best scientists and science communicators are being recorded and the programmes are being broadcast on BBC-TV and the Internet. Furthermore School/University outreach programmes are being developed and Vega is piloting ways in which members of the Science, Engineering and Technology (SET) community can, as individuals and groups, make important contributions. Excerpts from SET programmes will be presented. These efforts present a perspective on SET which places the cultural factors in the foreground and focuses on the intrinsic charisma of science which is hidden from many. It is now crucial that the society in general and the scientific community in particular accept that serious problems are involved in communicating science and the Internet as set to play a major role. Before the invention of the printing press there was only one book in the west - the bible - and it was hand-written by monks. After the invention the printing press book - writing and reading was democratized and this was truly the beginning of general education. In a similar way the birth of the Internet has democratized broadcasting - the broadcasting channels no longer control the dissemination of recorded material - individuals and groups of individuals can now do it themselves and so the Internet has enabled broadcasting to fulfill the promise it has always had - to be a superb educational medium.

Challenges of Distance Learning

Bob Richardson (1996 Nobel Laureate in Physics)

There is no longer question that the Internet and electronic communication are the major new tools for collaborative advances in the creation of new knowledge and in future learning. There are countless examples of highly successful professional courses taught of the Internet.

Similarly, international and multidisciplinary collaborations in scientific research based upon little contact other than through electronic communication dominate the scientific literature. Perhaps the most profound examples of distance collaboration in science are found in astronomy. The Hubble telescope has permitted astronomers to gather breathtaking images from the most remote observatory imaginable - one in orbit around the earth. A significant challenge remains. The challenge is to devise a remote mode for nonverbal communication about difficult concepts. In the shared creation of new ideas and knowledge, facial expressions and body gestures frequently play an important role in peer interactions. As the speed and bandwidth of electronic communication increase, we have the prospect that the important elements of human contact can be imitated. Without the development of sympathetic peer or mentor relationships, distance learning will remain quite sterile.