Introduction

Thank you for inviting me to make a short contribution to this 16th CCEM Stakeholders Conference and the theme of Learning Support, Materials and Technology.

I have prepared these remarks with my colleagues Paul West and Wayne Mackintosh, both South Africans. We shall use the time to reflect with you on the evolution of the technology of open and distance learning and the contribution of the latest technological wonder, eLearning.

It is helpful to put things in context so we start with a brief history of the parallel evolution of technology and open and distance learning (ODL). As a framework for examining eLearning we shall take four animals whose names have entered the language from various cultures as metaphors. Our title is eLearning in Open Learning: Sacred Cow; Trojan Horse, Scapegoat or Easter Bunny?

Technology and Open and Distance Learning: a little history

You can take different starting points for open and distance learning.

We start with St. Paul for two reasons. First his letters to the young churches of the 1st century launched the basic methodological framework of ODL which continues today and is captured in the theme of this session, Learning Support, Materials and Technology. To take them in reverse order,
Paul's **technologies** were writing, despatch carriers and oral exposition. He prepared **materials**, what we call today his epistles, which were copied by hand and carried to the various churches. There the priests and bishops provided **learning support** by reading the epistles aloud to the people, commenting on them and celebrating the sacraments.

A second reason for starting with Paul is that even if he can take only partial credit for the subsequent growth of Christianity, this remains the most successful and durable application of open and distance learning ever undertaken.

Subsequent technologies have embroidered and improved on what was available to Paul. The first was printing. This eliminated the need for fastidious hand copying of manuscripts and slowly but surely put the written word in the hands of ordinary people. We still call academics 'lecturers', recalling their role for many centuries as oral intermediaries between the written word and the student.

If education was slow to adjust to the implications of printing, it reacted more quickly to the next key technology, postal systems, which allowed print to be disseminated more readily. When the Penny Post, the first postal service, was introduced in Britain in 1840, Isaac Pitman took immediate advantage of this new technology to start teaching shorthand by correspondence. In so doing he launched the commercial correspondence education industry, which defined ODL for more than a century. We note in passing that the blackboard was invented at the same time as the Penny Post. It defined conventional teaching for more than a century and continues to do so.

In that century various new technologies came and stayed, such as radio, film, television, computing and computer assisted learning. Enthusiasts predicted that each new medium would revolutionise education, claiming that it was the most important invention since... Since what?

Revealingly, these prophets all took printing as their benchmark, not the previous technological marvel, thereby implying (correctly) that the previous wonder medium had not sparked the revolution predicted by its fans. From this secular experience, wise practitioners conclude that there is no magic educational medium and risk the hypothesis that there never will be.

No single technology is revolutionary but a combination of them can be. Thus, by the 1960s, the steady succession of technologies we mentioned had created a rich communications environment. At the foundation ceremony of the UK Open University in 1969 the Chancellor, Lord Crowther, captured this in some memorable words:

"The world is caught in a communications revolution, the effects of which will go beyond those of the industrial revolution of two centuries ago. Then the great advance was the invention of machines to multiply the potency of men's muscles. Now the great new advance is the invention of machines to multiply the potency of men's minds. As the steam engine was to the first revolution, so the computer is to the second".

The Open University took ODL beyond the simple process of correspondence education and into the era of multi-media distance learning. It took advantage of a range of media - mostly mass media - to enrich teaching and learning with much more attractive materials. It took advantage of new communications tools to improve learner support. In so doing it made possible a massive increase in access to higher
education, both in the UK and even more in Asia, where a host of local open universities have followed its example.

As the era of personal media succeeded the era of mass media, the open universities followed the trend, not abandoning the mass media, but incorporating the new online media that developed through the Internet and the World Wide Web. The UK Open University was using computer conferencing as a component of its teaching systems in the late 1980s and had 150,000 students interacting with it online by the late 1990s.

What is eLearning?

The term eLearning came into regular use around 2000. What is eLearning? The confusion around the term is part of the reason for writing this paper. Open and distance learning has a history of terminological confusion and eLearning is continuing that tradition. But since the term is now in widespread use it is worth pausing on the variety of meanings given to it.

For Wikipedia, eLearning "is a general term that relates to all training that is delivered with the assistance of a computer".

Others deny that the 'e' stands for electronic and argue that it stands for concepts like evolving, everywhere, enhanced or extended. This leads them to a fuzzy definition of eLearning as 'a learning environment supported by continuously evolving, collaborative processes, focused on increasing individual and organisational performance'.

For yet others eLearning is simply a sexier term for distance learning.

In exploring the place of eLearning through our four animal metaphors we shall remain aware of the range of interpretations of the term but assume that it does have something to do with electrons and computers.

eLearning as Sacred Cow

The term sacred cow refers to something that is immune from criticism, often unreasonably so. We apply it to the tendency to suspend our critical faculties when the term eLearning is used. It is today's manifestation of the tradition of genuflecting before a new magic medium that claims to solve our educational problems.

Fortunately, the starry-eyed visions promoted during the dotcom frenzy in 2000 have had to adjust to reality. Internet enthusiasts claimed then that the future of education lay in front of a computer screen and all other educational methods would soon be consigned to the dustbin of history.

Those who acted on that assumption by creating pure Internet teaching either went down in flames or quietly added other media, even books, to their materials mix. Nevertheless, even today you meet people who ask you if you are using eLearning in a tone of voice implying that a negative response brackets you with those who haven't yet made it into the 21st century. My advice, when you are faced with this
question, is to ask what they mean by eLearning. The chances are that the reply will be so convoluted that you will never have to answer the original question.

eLearning as a Trojan Horse

A Trojan horse is a subversive device placed within enemy ranks, referring to the hollow wooden horse in which Greeks hid to gain entrance to Troy so that they could open the gates to their army. We apply this analogy to eLearning in three ways.

First, like the Trojan horse, eLearning has been welcomed into the academic city. Computing technology strikes closer to the heart of intellectual endeavour than media like tv or radio so academics have embraced it more readily. But in doing so they may have prevented eLearning from being a subversive device. Using eLearning to best effect calls for some fundamental rethinking of pedagogy.

In research the challenge of fundamentally rethinking a paradigm would attract a large team, but academics mostly approach the use of eLearning in teaching as lone rangers. Thousands of teachers acting separately are less likely to develop a new pedagogy than a more concerted approach.

Second, because it has been absorbed into the cottage industry of campus teaching, eLearning is having less effect than it might in an area that welcomes subversion. Historically, educational media, especially the mass media, have made possible the revolution of distance learning, which has simultaneously increased access, improved quality and cut costs.

The power of eLearning should be harnessed to distance education; as is being done impressively by large institutions such as the UK Open University. In smaller institutions, however, those who might have developed eLearning as a tool for extending access have been drawn into using it to offer a richer experience to existing students rather than to reach out to a new clientele. It is as if the Greeks had been captured as they jumped out of their horse and prevented from opening the gates to let their army occupy Troy.

Third - a more subtle but important point - the Trojan horse of eLearning carries a problematic stowaway called Digital Rights Management. If I buy a book or a CD I may not copy it but I can lend it to others, one at a time. However, if I buy an electronic book, the seller often digitally locks the book so that I have to open it with a code, such as my credit card number. This prevents me from lending my electronic books to my friends as I do with the print version. In some cases Digital Rights Management even makes the book expire and become useless at a certain date.

DRM is a problem in eLearning. It allows no equivalent to the second-hand market for textbooks. Learners will need to pay the full price each year. All we can do here is flag the problem. Publishers and software producers need to get together to solve it, otherwise we shall see large-scale pirating.

COL is investing considerable effort in helping governments and institutions through the copyright maze and I shall come later to one solution that we strongly recommend.

eLearning as Scapegoat
A scapegoat is one that is made to bear the blame of others. Aaron confessed all the sins of the children of Israel on the Day of Atonement over the head of a live goat which was then sent into the wilderness symbolically bearing their sins.

eLearning is sometimes used as a scapegoat by those who might expand learning opportunities, particularly through distance education, but claim they cannot do so because they do not have the equipment, bandwidth or expertise for eLearning. The digital divide is used as an excuse for inaction.

This attitude, which is linked to the tendency to rename distance education as eLearning, is unfortunate and unnecessary. It is perfectly possible to offer distance learning of good quality at scale without having all the paraphernalia of eLearning. After all, St. Paul lacked bandwidth!

**eLearning as Easter Bunny**

Finally, on a more cheerful note, we come to eLearning as the Easter Bunny. In ancient times the rabbit was a symbol of fertility, equated with springtime and the renewal of life. The Easter Bunny makes her visit every year, scattering brightly-coloured eggs as she goes. What brightly coloured eggs are being scattered around our educational garden by eLearning? We identify three - in increasing order of importance.

First, eLearning allows online access to a huge array of resources: the libraries and museums of the world and much more. The challenge to teachers is to help students to use these resources wisely and purposefully. After all, pointing students in the direction of a conventional library does not, of itself, lead to useful learning.

Second, eLearning speeds up communication, which is usually a good thing. Research shows that students benefit from timely feedback. Electronic submission of assignments removes any delay in transmission, although it does not guarantee that teachers will correct and comment on the student's work quickly. The fact that contributions to discussion (e.g. in chat rooms) must be made in writing is also helpful. It slows down communication and gives people more chance to express their points clearly. This is particularly helpful to those who lack confidence in oral expression; say because they are working in a second or third language.

Finally, we believe that the most brightly coloured egg brought by the Easter Bunny through eLearning is a global intellectual commons of learning materials that can be shared and adapted. These are called open educational resources (OERs).

People are contributing eLearning materials to common repositories under licences that allow others to use and adapt them provided they acknowledge the source and put their adaptation back into the system for onward use.

Open educational resources are an antidote to all three of the bad effects of eLearning as a Trojan horse: academics need not re-invent every wheel of course content; the cost of developing learning materials, which is a major obstacle to distance learning, is slashed; and the use of open content licences removes the spectre of locking up knowledge under Digital Rights Management.
Conclusion

eLearning, like all technologies, can be used well and badly. The Commonwealth of Learning is helping the small states of the Commonwealth use it well through the VirtualUniversity for Small States of the Commonwealth, which the Secretary-General will formally launch at 16CCEM. Its aim is to allow the small states to work collectively to master the eWorld and bridge the digital divide. The collaborative development of Open Education Resources is the foundation of its work.