by Dr Keith Cardwell

# Blackboards and SATELLITES

**When I first started training one of my pet hates was vacuuming. Every night after class the last chore before locking up was to vacuum all of the chalk dust off the floor from the lengthy sessions writing on a blackboard.**

Then came white boards and overhead projectors. No more dust!

Then carousels of slides with integrated audio-tapes changing slides automatically when the machine went beep!

Then came video.

Then DVDs.

And now – students don't even have to come to class but can do all the theory at home and just turn up for the wet, practical stuff!

E-learning arrived. Satellite communication capability has saved us at last!

Or is it all just a way of allowing lazy educators become even lazier?

Maybe, but many educational institutions such as universities and technical colleges see this form of learning as an integral part of their business. And diver-training agencies see themselves as no less qualified to take advantage of this process.

But has this reduced the importance of the diving instructor in conveying knowledge to his/her students? Possibly.

I hear many voices that are cynical of this process directed at diver training but I think there is certainly more going for it than not. It certainly modifies what elements of a dive course an instructor should place emphasis on - and it's certainly not directed at being smarter in a classroom.

After all, learning is not all formal but the stuff that is can probably be better handled by the simple process of watching a computer screen and responding to it as is now commonplace. Getting out of a classroom and letting robots take over isn't all that bad an idea and that's where e-learning excels and instructors can concern themselves with how the theory is actually applied in practice.

## E-learning

It is fairly clear that the e-learning option contained in the formal learning process allows for a more flexible approach to learning so those sections in any curriculum that do not require any practical involvement can be covered remotely: therefore less time is required at a possibly distant venue. With the greater role being played by e-learning in all levels of diver training it can be seen that the interaction between student diver and instructor is being minimised and as much as possible being relegated to in-water training directed at learning essential practical skills. Nearly all levels of diver training with all diver training agencies now have both support systems and materials available to minimise face-to-face or traditional classroom contact with the diving instructor.

Such a change to the on-line learning environment is not detrimental at beginner levels of training as this now changes the way a diving instructor can perform his or her job. It assists with the dispensation of spontaneous, homegrown approaches to lecturing and it provides more chance of students learning from a well-designed process which avoids ambiguities and redundancy of expressions. For instance, in the open water diver course, the system of learning can be reduced to reading short, simply constructed chapters, watching a DVD, checking questions done for homework (or in a short period of class time after watching the DVD), answering a 25 question written, multi-choice/true-false style quiz and then either getting straight into the confined water for a practical session or repeating the former cycle of events until in-water training is required.

The only time an instructor is needed for information is to answer and elaborate on homework or quiz questions answered incorrectly. No formal lectures are needed, as all of the information at this stage of learning is simple and immediately relevant. Optimising time for practical skill learning is quite logical and time-economic.

Reduction in face-to-face time may be a downside to the e-learning process but from what I have seen of many instructors in a classroom, that's probably not a bad thing after all.

At least no-one has to add vacuuming to the latest techniques of teaching!