Get the Most from Electronic Learning (for trainees)

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There has been an unprecedented growth in the availability of E-learning opportunities provided by various institutions. Doctors of all grades suffer with 'information overload'. It is not just that they are overwhelmed by the availability of information in general but also the availability of an excess of information that is relevant to their day-to-day practice. How does a doctor in training in particular know which sites are quality assured and fit for purpose? The introduction of European Working Time Directive (EWTD) in 1998 and Modernising Medical Careers have had a significant impact on medical training in the UK. The move from time served to competency based training combined with the reduced hours of EWTD mean that innovative strategies are required to ensure high quality medical training.

Why bother with E-Learning?

There is increasing evidence that those born after 1982, the so-called 'Millennials', (Raines 2002) expect and need a different learning environment. They require a more student centred learning environment as they are more likely to be team players and are fascinated by new technologies. There are also many people born before 1982, the 'pre-millennials,' who have learned to use the same technologies to acquire the knowledge and skills they need. These groups have two things in common;

1. They take a more active role in determining what it is they need to learn.
2. They have developed effective strategies for using a wide variety of media in their learning.

It is this last point of commonality that can be the stumbling block for those who fail to benefit from E-Learning. Without effective strategies for using any given learning experience, including attending a lecture, watching TV or participating in an online forum, little will be gained. These strategies take a little time to develop but are well worth the initial effort.

Another reason often cited for non-engagement with new technologies is the perception of their complexity. Given the ubiquity of networked devices such as mobile phones, PDAs, laptops, GPS, etc., most people already engage with the same technologies used for E-Learning on a regular basis. Extending these same advantages to your training means;

◗ Ease of access to training at a time, place and pace that suits you.

◗ Geography is not an issue. Exposure to other cultures of medical practice helps challenge existing methods, ideas and can build healthier attitudes.

◗ Content can be saved, printed, sent, copied, re-copied, converted to another platform, archived and used in any way you see fit.

◗ The available media and platforms can provide a much richer experience.

◗ Content can be updated quickly.

◗ Web browser technologies can translate pages from one language to another.

However in practice some E-Courses are built following all the rules but have never been updated, others may have been built using inappropriate instructional strategies, inappropriate media, or built using information that reflects opinion rather than best practice.

There are some simple rules you can follow to help you to sort out the good ones from the bad. But before going out there and finding Electronic resources you need to be clear about your learning objectives for each session. Treat an E-Learning session like any other training, the only difference is that you can leave and rejoin it at any time;

◗ Do you want to acquire new knowledge or skills or update prior knowledge and skills?

◗ How is your E-Learning going to link in with the other parts of your training? (referred to as the blended learning approach).

◗ Does the course form part of a formal qualification?

Limitations

It is clear that E-Learning cannot be seen as a substitute for traditional face-to-face work-based learning. It is also clear that if you are new to E-Learning it takes a little time and practice to get the most from it but like any other training, you only know what it is like after you have completed it.

With E-courses you do not have face-to-face contact with the trainer/tutor. Some courses provide direct access to tutor feedback but this will generally be limited to the programme.

The Golden Guidelines

✔ **Use ERs recommended by a reputable source.** Ask your college tutor, educational supervisor and peers.

✔ **Does it have clearly stated aims and objectives?** Be clear about your own learning objectives and check to see whether the ER matches your own.

✔ **Is it clearly structured?** Without a clear structure it will be very difficult to leave the ER at any given point and return at a later date to continue from where you left off.

✔ **Is assessment featured?** Formative assessments are designed to help you gauge how much you have learned and can also give you an opportunity to apply concepts dealt with in the ER if they are well written. Summative assessments are designed to help other people gauge how much you have learned and usually feature at the conclusion of a course.

✔ **If you can flick through the pages, don't bother.** By this we mean if you can go through page after page without the resource periodically asking you to apply the concepts or knowledge given in some way, then you are not likely to learn much from it.

✔ **If it doesn't give you feedback, don't bother.** Feedback on your progress from a carefully crafted quiz will help you apply and gauge your understanding of the course content.

The exception to this is in the case of pre-tests, their primary purpose is to activate your existing knowledge of the subject so that the knowledge received from the course can be better integrated with your existing knowledge framework. Used in conjunction with post-tests they also help you to see what you have learned.

✔ **Choose your suffix well.** The .com or .co.uk at the end of a web address (URL) usually indicates that the site belongs to a company. Companies do provide excellent resources but be aware of the nature of the relationship between the content of the training material and the commercial interests. Choose a .ac.uk for academic institutions or a .org for an organisation instead. They are less likely to have as much bias as companies.

✔ **Is the training accredited?** Accredited courses usually provide you with a certificate on completion of the course. (see www.elwa.ac.uk/elwaweb/elwa.aspx?pageid=2567 for more detail).

✔ **Is it paced or self directed?** Paced courses have deadlines at particular points during their length. This means you will be learning alongside other people and usually indicates the course will involve an element of collaborative work. If it is paced then you will need to find out how much time you will need to spend on it per week and consider whether or not you can commit to this. If it is self directed (i.e. you decide when you do it) then you will still need to consider how much time you are willing/able to commit to it and set aside regular times for your E-Learning. The key to this is little and often, half an hour every other day is better than eight hours once a month.

✔ **Does it meet your needs?**

Some examples of E-courses

Intercollegiate Surgical Curriculum Project
(www.iscp.ac.uk) provides comprehensive ERs under 4 headings; clinical judgement; technical and operative skills; speciality based knowledge and generic professional skills.

NHS portfolio
(www.nhseportfolios.org) provides the opportunity to develop an E.portfolio – no need to carry a heavy logbook around with you.

Doctors.net
(www.doctors.net.uk) provides a range of e.courses and access to online books. These are free at point of access but the site is sponsored by pharmaceutical and other companies.

BMJ learning
(www.bmjlearning.com) provides over 100 learning resources targeted for GPs, hospital practitioners and all trainees. Free if a member of the BMA, otherwise an annual fee.

Further Information

Howe, N. and Strausss, W. (2009). *Millennials rising: The next great generation.* New York: Vintage books.

Espinoza, C., Ukleja, M., Rusch, C. (2010), *Managing Millennials.* Wiley and Sons: London

Garrison, D.R. (2011). *E Learning in the 21st Century: a framework for research and practice.* Taylor and Francis: London.

Interested in learning more about this and other educational topics? Why not professionalise your role with an academic qualification at PGCert, Dip or MSc in Medical Education via e-learning or attendance courses.
Contact: **medicaleducation@cardiff.ac.uk**

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