

# Logging-in to online horticultural courses

The use of e-learning to teach and train horticulturists is not a new thing, but the use of online learning in horticultural education and training has expanded and developed significantly over recent years. **Leigh Morris** outlines the strengths of this approach, reviews some of the courses available and sets out his vision for the future.



**Leigh Morris**

IOH President Leigh Morris has been involved in the delivery of horticultural education and training since 1990, at Pershore College, the Welsh College of Horticulture and, latterly, at the Royal Botanic Garden Edinburgh (RBGE), where he is now employed as Associate Director of Horticulture (Learning). Leigh is a believer in the need for lots of 'hands-on practical training in horticulture', but also recognises the great potential for using technology to enhance learning. Leigh led a team from RBGE in the set-up and development of their own online learning platform, *PropagateLearning*, launched in 2013 and now used to support many of RBGE's courses. Twitter: @MorrisLeigh

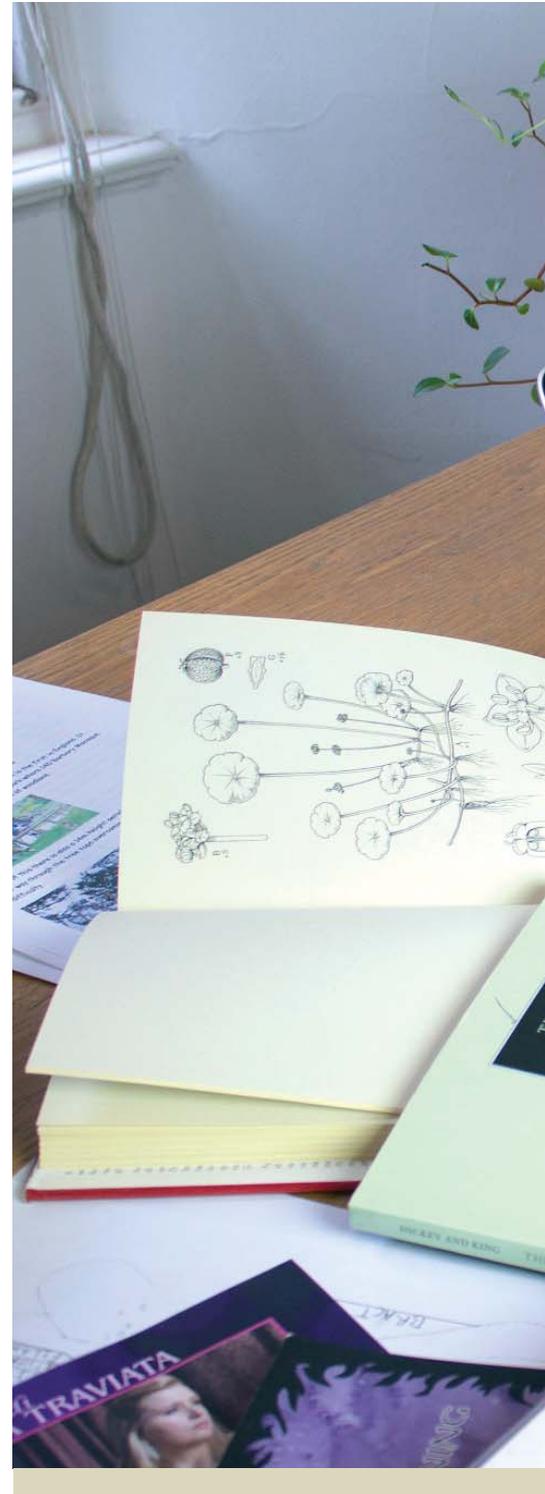
Remote learning or 'correspondence courses' are not a new thing and the idea can be traced back to 1926, when the educationalist J C Stobart wrote a memo, while working for the infant BBC, advocating a 'wireless university'. This idea developed in the 1960s with the formation of the Open University (OU), which enrolled its first 25,000 students in 1971. The use of new technologies for learning was also pioneered by the OU and by 1988 it had a Personal Computing Policy, had introduced three courses that required use of a computer and OU students communicated with each other using the CoSy conferencing system.

The OU is now one of the world leaders in online learning provision and according to Brenda Gourley, OU Vice-Chancellor 2002-2009, "the future of open and distance learning lies with technology – a technology that combines with human ingenuity to deliver even more possibilities" (Open University, 2014).

## Early horticultural online delivery

One of the first articles exploring the use of online learning for horticulture appears in the proceedings of the International Society for Horticultural Science (ISHS), *First International Symposium on Education and Training in Horticulture*. Chaired by Professor Geoff Dixon FI Hort this took place in July 1992 at the Scottish Agricultural College.

In their paper entitled *Using Computer-Assisted Learning to Enhance Education in Horticulture*, Clive Young and Simon Heath from the University of Aberdeen, outlined the initial uses within horticulture and also their thoughts on the future. They referred to the increasing use of computer-assisted learning (CAL) and concluded that "many lecturers in horticulture... are already making innovative use of computers in teaching and there is genuine enthusiasm among a significant number of staff to see more and a wider use of computers in their teaching" (Young & Heath, 1993).



During the 1990s some land-based colleges developed projects in which online learning was utilised to teach horticulture, but these were often small-scale and driven by one or two individuals in the institution, for a relatively small number of learners. There was at that time no real culture on adopting online learning methodologies across all curriculum and learners were not really demanding or expecting technology.

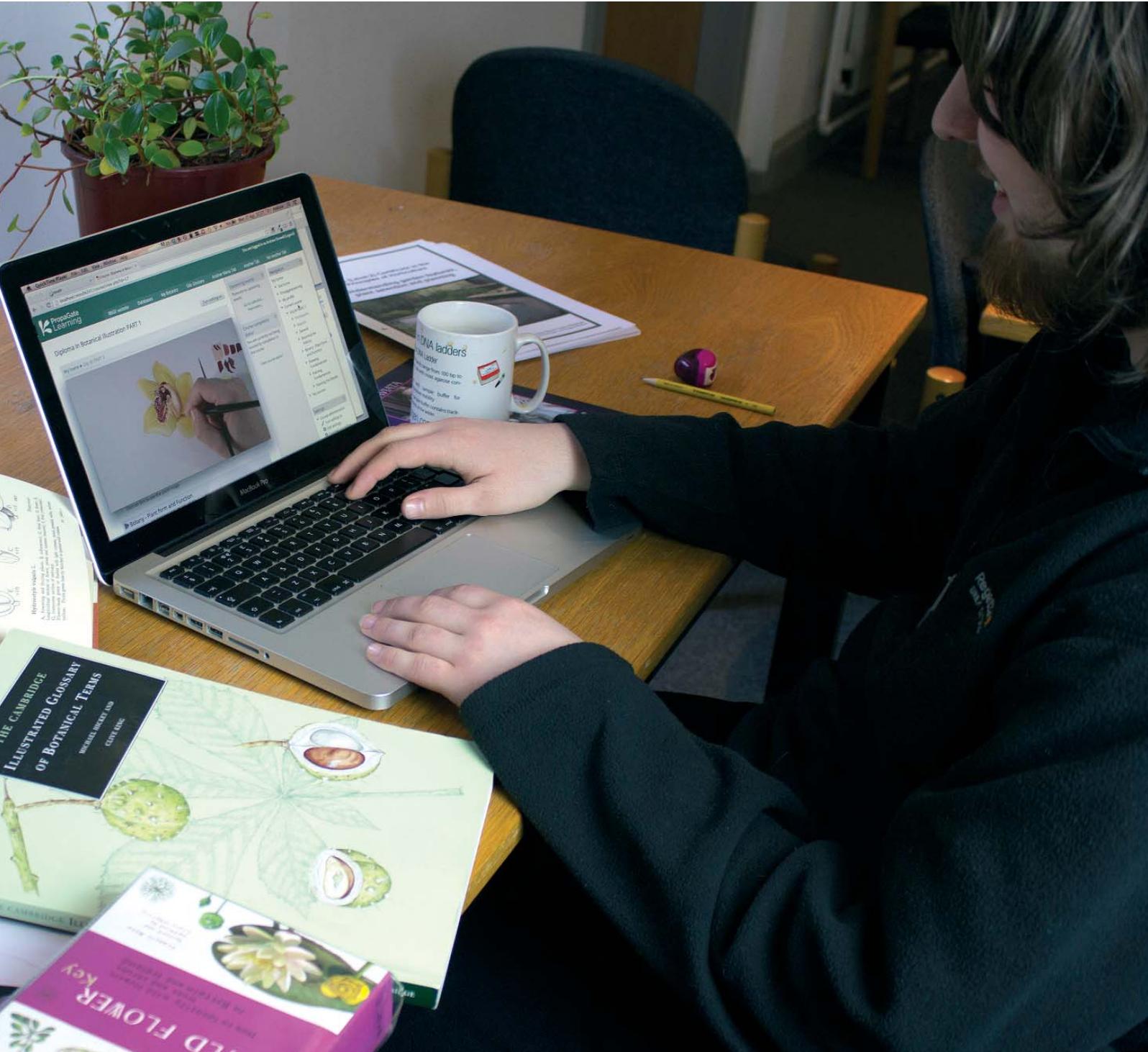
## Current online delivery

Things have changed greatly since the turn of this century and if you type 'online horticulture course' into Google a list of providers appears. These can be broadly divided into colleges/universities delivering professional courses, and businesses providing online courses, predominantly for the amateur gardening market.

The use of online technology by horticultural colleges is increasing and most now have a virtual learning environment (VLE) to provide online



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Remote learner studying online via the Royal Botanic Garden Edinburgh's *PropaGate Learning* virtual learning environment. Is this the future for horticulture education?

support to their students (VLE is a website specifically designed as a learning platform). Colleges, however, are typically using their VLE to support their students on full-time courses, by using it as a drop box or filing system for course Word documents, pdf files, PowerPoint presentations and assignment briefs. It is good that these course documents are collated and made accessible to students in this way, but the potential for a VLE is far greater and there needs to be more interactive online content to engage students and facilitate learning, especially if students are working remotely.

Some colleges, including Pershore College (where I have been an External Examiner since 2012 for the University of Worcester, Higher National Certificate (HNC) and Pershore Diploma programmes) are driving this forward. Pershore set up the PLANTFAX online training modules in 1991 and current students give positive feedback in respect to their use of a VLE, as

well as other online technologies such as 'Wikis', with tutors Rhona Toft and Colin Perkins leading the way.

### MyGardenSchool

In my opinion, the best current provider of online horticulture courses, certainly for the gardening and amateur market, is MyGardenSchool ([www.my-garden-school.com](http://www.my-garden-school.com)). Established by founders Elspeth Briscoe and Duncan Heather in 2010, it evolved out of the Oxford College of Garden Design. I was delighted to speak to Elspeth in researching this article and gained a really fascinating insight into their vision and approach.

Elspeth is clearly a technology innovator and in 1996 wrote a dissertation on the future of the internet and how peoples' communication styles would change. She is passionate about innovation in communications and her initial career saw her working in communications for IBM and others

in developing internet start-ups. Elspeth was in the start-up teams for eBay and subsequently Skype, working on the strategy that has led to where it is now.

More recently she has also advised *The Guardian* on its digital strategy. Like many others, Elspeth decided on horticulture as a second career and gained a Distinction on the Oxford College design postgraduate course. While there she encouraged her colleagues to communicate through Skype and the use of this technology significantly enhanced their learning. Oxford College of Garden Design Principal, Duncan Heather, was impressed with Skype and already had some plans to develop online learning, so he and Elspeth came together as co-directors and My Garden School (MGS) went live in April 2011 after over a year of planning and development.

MGS developed a visionary strategy around working with the best person it could find within each niche of horticulture. Elspeth sees MGS as



“being like a bookstore, with, for example, potentially five people teaching courses about planting design. Keen people would buy five books on the topic and what we are finding is that they would do five courses on planting design too.” To date, MGS has produced courses with some renowned horticulturists, including John Brookes, Noel Kingsbury, Andrew McIndoe, Alex Mitchell, Toby Musgrave and many other highly acclaimed names.

MGS aims to provide premium quality in terms of content and user experience, with ‘community classrooms’ that facilitate interaction between the students and tutors, being an incredibly important part of the learning process. In respect of content creation, MGS has its own studio and films are produced using talking heads, stills and videos combined into ‘real lectures’. Currently there are 25 different MGS courses available, aimed at passionate amateurs through to professionals, with “the number of students per course being capped at 20 in order to maintain quality”. MGS has ambitious plans for the future and is adding a new online horticulture course every couple of months.

Elsbeth believes that “there isn’t anybody who can’t learn online, however, it is particularly suited to people who don’t have access to world class horticulture courses locally, and it’s incredibly well-suited to anybody who is disabled, impaired or elderly. Online learning dispenses with geographical boundaries and allows the creation of truly global communities. For example, people in Japan who are passionate about building rose gardens would never be able to go to an evening class and get input from David Austin Roses or Michael Marriott”.

### Blended learning

For me, the most exciting opportunity for online learning in the teaching of horticulture lies with blended (or hybrid) learning. In this approach

learners come together for occasional evenings, days or weekends and then return to their homes to continue studying remotely. Alternatively, a tutor could visit a group of learners to deliver specific elements, before, again, leaving them to work from afar. The clear advantages of blended learning are that students meet their tutors and peers, forming face-to-face bonds and friendships, and most importantly, they get to visit a place, engage with plants and get their hands dirty!

There are some great examples of blended learning in other vocations, but a good UK horticultural example is the Royal Horticultural Society (RHS) Master of Horticulture programme. The MHort (RHS) has been the Society’s most prestigious professional horticultural qualification for many years and I can recall students coming to Pershore for MHort (RHS) block weeks in the 1990s. Numbers studying the programme were, unfortunately, never huge and in 2009 fewer than 10 were registered.

Tim Hughes (RHS Horticultural Courses Manager) had seen the effectiveness of online learning from his children using a VLE at school and also his wife’s experience as an OU student. Tim believed it was the way forward and the RHS set up a VLE site for the MHort (RHS) course, which gives the students online access to guidance documents, course notes, assignments, news and announcements, as well as discussion forums where students can discuss and share ideas with other students, academic tutors, alumni and RHS staff.

Importantly, the RHS has included a blended learning element within the course, where students come to the RHS Garden Wisley, for one-day module workshops that provide an introduction to each topic and offer the opportunity for students to meet with the module tutors, RHS staff and fellow students.

This new blended MHort (RHS) format has seen student numbers rising to around 30 per year enrolling and there are currently students on the programme from Hong Kong, Canada, Ireland, New Zealand, Belgium and Eritrea.

One of the current MHort (RHS) students is John Farmer, Commercial Resources Manager at Pershore College. He believes that “the best experience is when modules are introduced by the tutor in the workshops and students discuss and get to know each other and the subject, which then forms the base for dialogue over the VLE”.

I personally believe that blended learning is fundamental for those colleges and organisations that want to be a national, or indeed international, centre of excellence for the delivery of horticultural education. When I first went to Pershore College as a student in 1987 it was to study Hardy Nursery Stock Production, as Pershore was a centre of excellence for commercial horticulture.

Unfortunately, changes in government policy and funding mechanisms meant that Pershore (and other similar colleges) were forced into more of a local recruitment policy, which has continued. I believe that colleges could become the centres of excellence that they aspire to through the offering of blended learning packages. Then learners from across the UK and around the world could attend for block courses and then return home to be supported by an online platform. The key is that col-

leges plan their courses so that traditional classes and lectures can be done remotely and the days students spend at college contain lots of hands-on practical sessions, group work, seminars and discussion. In effect, learners ‘do the nice stuff in the nice place’.

### PropaGate Learning

In 2013 the Royal Botanic Garden Edinburgh (RBGE) launched its own virtual learning environment, named *PropaGate Learning* ([www.propagatelearning.net](http://www.propagatelearning.net)). We spent much time researching and tendering for the right VLE software and support company and chose ‘Moodle’ software, Synergy Learning and Jon Bolton to work with us (co-incidentally this was precisely what the RHS had chosen for its VLE).

‘Moodle’ is the most widely used software and it was also the cheapest to get up and running as it is open-source (i.e. free to download) and the support from Synergy was tried and tested on many clients already. We did debate internally having a bespoke VLE designed and built for us, but took the decision that ‘Moodle’ does exactly what it needs to. We realised that ‘content is key’ and so decided to invest our time and money in the creation of interactive quizzes, presentations and short films demonstrating horticultural techniques.

For filming we set up a studio in one of our lecture rooms, persuaded a number of our experienced horticulturists to perform their skills in front of a camera and then edited and added a voice over. We now have short (less than three minutes long) films on 23 different horticultural skills, ranging from softwood cuttings to potting-on, with another list being developed for the next batch. It has been an excellent learning curve for all of us and these short films are now being linked to support learners on a number of RBGE’s



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**The PropaGate Learning home page. The Royal Botanic Garden Edinburgh’s vision is for its VLE to be the best online learning platform for horticulture and plant science courses. Partnerships are fundamental in achieving this.**



ALL IMAGES, LEIGH MORRIS/RBGE

The Royal Botanic Garden Edinburgh is investing time and money in the creation of films and other interactive content for PropaGate Learning. Here, Head of School of Horticulture, Phil Lusby, is being filmed by their film maker (and ex-RBGE student) James Clugston, for the introduction to the RBGE Diploma in Garden History.

courses and modules.

RBGE is involved in a great deal of international work focused on training horticultural skills that will help with plant conservation around the world. For many years our horticulturists have delivered wonderful short training courses to build capacity in staff teams within a number of countries – and I've personally taught the RBGE Certificate in Practical Horticulture in Laos, Oman, Thailand and Turkey. RBGE courses work well and student feedback is always excellent. However, after the courses have ended, RBGE staff return to Scotland and the students typically have had very little contact with tutors following on from the courses.

Our vision now is to use our VLE to support these countries beyond the short courses. Excitingly we are now working with Botanic Gardens Conservation International (BGCI – the world umbrella organisation for botanic gardens) in the writing of the new edition of its *Darwin Technical Manual*, the handbook for botanic garden set-up and development. The plan is to turn the new book into an e-book and also a series of online courses, hosted on *PropaGate Learning*. This will provide a fantastic resource for capacity building and I was delighted to do a presentation on this at the BGCI congress last November ([www.youtube.com/watch?v=Kh15vWSC1Hg](http://www.youtube.com/watch?v=Kh15vWSC1Hg)).

RBGE's Head of Education, Dr Greg Kenicer believes that *PropaGate Learning* is proving incredibly versatile. It has opened up so many different ways for learners to access what we do. This ranges from supporting local students at all levels,

blended learners to distance learners in Scotland, and we're also able to use it for in-house training and capacity-building projects overseas. The potential for supporting community projects and citizen science is great and we are also aiming to create Specialised Open Online Courses (SOOCS) or Massive Open Online Courses (MOOCS) for elements of our BSc and MSc programmes.

RBGE's vision is to create the best online learning platform for horticulture and plant sciences. We believe the key to achieving this is partnerships, particularly in the creation of dynamic content. Elspeth Briscoe refers to the term co-opetition, which is widely used in the US in respect of organisations working together for mutual benefit and the greater good and with this aim RBGE is encouraging organisations to work with us.

### The future?

My own initial experiences of using technology to learn consisted of using a CD-Rom of videos, audio and interactive quizzes to teach me about meteorology and I recall it being far better than a book! People have different learning styles and for many it is far more engaging to be able to watch films and interact, rather than simply read text or look at images. The use of a computer connected to the internet now goes way, way beyond what was possible only a few years ago and there are now very few places in the world where you can't get (good) internet access. A VLE is just one part of the whole online package needed to support remote learners. E-mail is of course useful, as is

social media in its many forms. Face-to-face technology through webcams, such as Skype for tutorials, webinars, podcasts or augmented reality, which allow tutors to engage online with a great number of people live, is increasingly useful.

Will online learning ever replace offline courses completely? I don't believe so. Horticulture is a vocation that requires you to get dirty hands if you want to acquire practical skills and there will never be any substitute for learning in a wonderful place, taught by enthusiastic, skilled and knowledgeable tutors, using fantastic resources and living plants.

For a great many people, however, with busy lives, or who don't live close enough to a learning centre to attend regularly, the use of such technology will undoubtedly become even more important in the next few years. These students will demand it and colleges and learning providers who do not fully embrace the technology will be left behind. The opportunity is there now for learning providers. The vision of 'centres of excellence', with key partnerships and blended learning at their core, is where I believe the future lies.

### REFERENCES

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