

Knowledge, standards, ‘plantology’ and mentors: promoting excellence in horticulture for everyone

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Abstract

The Sibbaldia & PlantNetwork Conference 2020 opened with a free session. Participants were required to register in advance, and registration was open to anyone with access to the internet. A total of 300 participants registered and 142 attended on the day. A video recording of the session was available to view for six months after the event.

The format of the session was a chaired panel discussion that explored what excellence means in horticulture. Topics were shaped by participants’ responses to an online survey that asked the question ‘What does excellence in horticulture mean to you?’, with a word cloud created from these responses. The Chair navigated a discussion through the ideas that were of greatest significance to participants, according to the responses given in the survey. Panellists presented their own experiences on the subjects discussed and shared their organisation’s approach to each issue. The result was a lively and informative discussion between five experts in the fields of horticulture and education that focused in particular on the knowledge educators want to share, how standards are defined and what institutions can do to foster excellence. The discussion moved on to examine how more young people can be drawn into horticulture and benefit from subsequent professional development opportunities.

Introduction

The Sibbaldia & PlantNetwork Conference 2020 was a ticketed online conference held on 28–30 October 2020. The organisers felt it was important to make the event as accessible to as many people as possible whilst also ensuring costs were met. As well as providing competitively priced tickets, including early bird and student ticket options, a range of bursaries were also available to facilitate places. A no-cost opportunity to take part in the event came in the form of the free-to-register panel discussion described below. Three hundred people registered for this free session, 142

attended on the day and at least 72 so far have watched the video.

The Chair of the free panel discussion was Doug Stewart of Waring Stewart Associates, a horticultural consultancy based in Yorkshire (UK) with experience in developing training programmes. The panellists were Sarah Masterton of Longwood Gardens, Pennsylvania (USA), Suzanne Hermiston of Royal Botanic Garden Edinburgh (RBGE), Dr Suzanne Moss of the Royal Horticultural Society (RHS) and Gail Bromley, an independent consultant representing the Botanic Gardens Education Network (bgen).

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Registered participants were sent a link and a code to allow them to participate in an online survey and poll on the slido app.² They were invited to answer a number of questions, with the moderator enabling all responses to be seen on screen so that participants could vote on which response they considered most important. The Chair then facilitated a discussion around the topics that participants had identified were of most importance to them.

The outcomes of the survey

Of the 142 participants, 84 responded to the questions asked in the survey.

The first question asked was 'What does excellence in horticulture mean to you?' Fig. 1 shows the word cloud that was generated from the responses. Participants were able to enter more than one word in response, although the numbers indicated that most attendees provided only one. The four most popular responses were displayed, along with the percentage of people who considered

each one to be the most important.

These were 'Knowledge', 'Professionalism', 'Sustainable' and 'Education'.

The second question, asked later in the discussion, was 'What one change could be made in your organisation to embed a culture of excellence?' The most popular responses to this question were 'Mentoring', 'Training', 'Networking' and 'Collaboration' (Fig. 2).

The discussions

Knowledge

The Chair asked, 'How is your organisation rising to the challenge to deliver excellence in horticulture?'

Each of the organisations represented by the panellists is passionate about their practice and as a consequence staff are very generous with their knowledge because with that passion comes a desire to share it. However, formal education programmes and professional development opportunities are also important to ensure that standards are maintained and that the concepts of excellence are consistent and supportive. The RHS takes a three-point approach to its

²www.slido.com

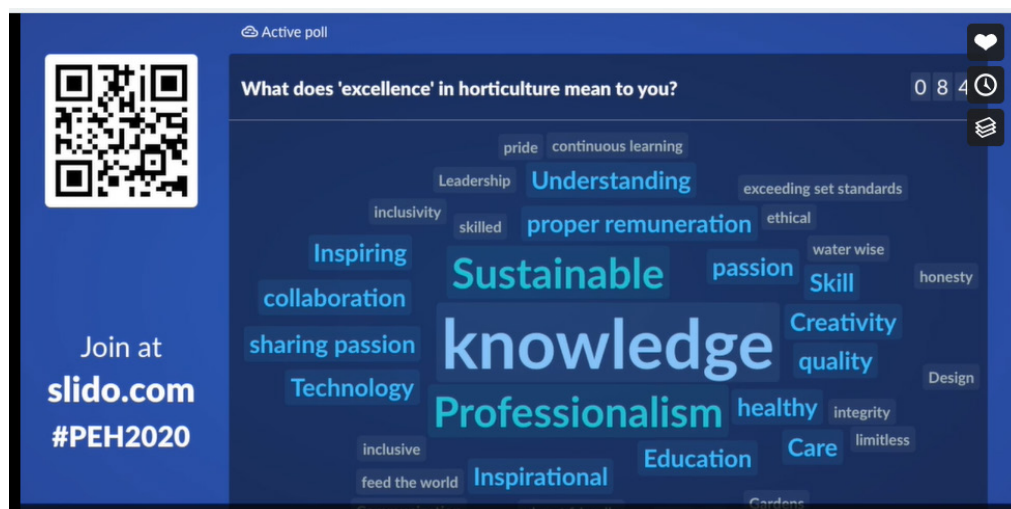


Fig. 1 The word cloud generated by the first question to registered participants. Word cloud created by slido.com and moderated by Rebecca Slack.

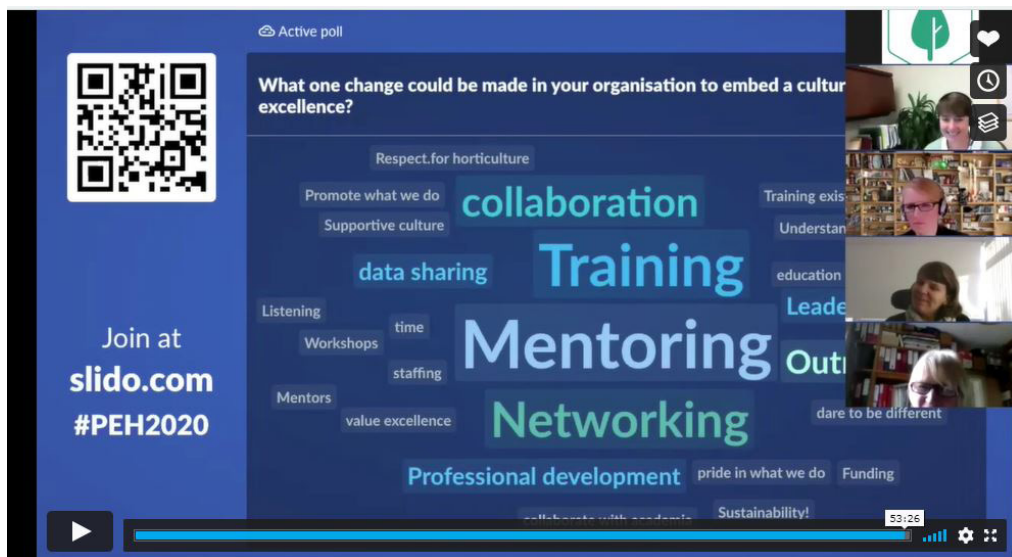


Fig. 2 The word cloud generated by the second question to participants, showing the panellists. Word cloud created by slido.com and moderated by Rebecca Slack.

mission: skills, environment and wellbeing. Knowledge and passion clearly play an important role in drawing these three keystones of the mission together.

Dr Suzanne Moss (SMo) revealed that a survey commissioned by the Ornamental Horticulture Roundtable Group had shown that 23.8 per cent of employers are unable to find people who already have the knowledge and skills required for the positions available (RHS, 2019). The results of this survey indicate a significant skills gap in the horticulture industry. The RHS aims to close the gap by offering a comprehensive range of programmes for all ages and levels from early years to the Master of Horticulture programme for professional horticulturists. Gail Bromley (GB) pointed out that sharing knowledge, whether through formal programmes or side by side during the working day, is vital for ensuring there is no gap in the future. Suzanne Hermiston (SH) introduced the idea that the – admittedly difficult – Covid-related lockdown has also

generated an opportunity for RBGE. It has had to upgrade its online offer and this has expanded reach and engagement with online learning. The key to this expansion is that teaching staff have been able to increase their proficiency with online systems (with admirable responsiveness) and these systems have been implemented at speed to enable delivery of online learning. All organisations in the discussion have extensive education programmes and these are vital for maintaining a throughput of trained horticulturists.

The Chair then asked, 'Whose knowledge is it?' and 'How are decisions made about the knowledge which the horticulturists of the future need?'

GB commented that evaluation of the programmes leads to improvement of the programmes. Part of the evaluation process is deciding which knowledge should be passed on: 'What will the programmes cover?' Therefore, implementation of evaluation techniques is a very important part of

successful programmes. Sarah Masterton (SMA) agreed that understanding how successful a programme has been and how far it has reached is vital. Part of her role as Vice President, Engagement & Learning at Longwood is to ask, 'What difference did that programme make?' SH said it was important that the practical knowledge was brought through continuously in programmes and that this is currently a shortcoming of online learning. SMA described what Longwood is doing to overcome these 'practicality' barriers, including sending floral materials out to learners on the floristry course so that they could work with the materials at home while participating in the online lesson.

SMA cited the Master of Horticulture programme run by the RHS as playing a significant part in sharing knowledge at a high level for managerial roles. The Science Team at the RHS are continuously generating knowledge with the research they do. New information and research outcomes feed into knowledge passed on through all levels of horticultural training programmes. All agreed that ongoing evaluation and innovation are required to cope with the changes that are happening in society.

Standards

The Chair built on these responses and asked, 'How should standards be defined and how can these be maintained?'

In the past, neat colour-themed schemes of bedding plants and straight lawn stripes were considered to be a high standard to aim for. In 2020, wildflower and grassland plantings to encourage biodiversity in planting schemes and the 'naturalistic' aesthetic were increasingly popular. SMA pointed out that in many cases changing norms and values originate either completely outside the industry or in related industries,

and the standards to which horticulturists aspire tend to change as society changes. The definition of standards is also dependent on what and who the horticulture is for. Horticulture is an extremely diverse area of activity and interrelates with many others, therefore the context is important when seeking to define what counts as 'high' standards. All agreed that the quality of education offered by their organisations contributes to the setting and maintenance of standards.

SMA stated that it has been indicated to the sector that it is unlikely that there will ever be a GCSE³ in Horticulture. Therefore, educators in the industry have to look at how the principles necessary for an understanding of horticulture can be introduced into other parts of the curriculum. To do this requires encouraging young teachers to incorporate the important principles into their lessons as well as delivering outdoor learning. In turn, professional development opportunities for teachers are required to ensure they have these skills too. SMA shared that in the USA, agriculture is taught at the level of the 16-year-old cohort and this is where horticultural education is incorporated. Students can choose to specialise in horticulture after this point and it is once they have completed these introductory horticulture courses that they may continue on to the more specialised programmes at Longwood Gardens.

Standards have fallen in many further education colleges because of a lack of interest and perceived lack of status of horticulture as a career. It is a challenge to which the industry must rise in order to change perceptions. SMA shared that the

³ A secondary-school qualification in a specific subject typically delivered in England, Wales and Northern Ireland to the 15–16 age group.

'Seed Your Future' programme (Yoder, 2020), which aims to promote horticulture and inspire people to pursue a career working with plants, carried out research into young people's perceptions of horticulture. Results showed that the word itself is offputting, with 'plantology' and 'plantologist' instead of 'horticulture' and 'horticulturist' seen as more expressive and inviting terms. Horticulturists, alongside colleges and schools, need to make plants relevant to young learners, to attract higher numbers and invigorate horticulture departments in colleges.

SMA pointed out that horticulture apprenticeships are being delivered and T levels⁴ in horticulture will be available from 2023. These are excellent broad introductions to the horticulture sector and should be valued by the industry. We must also ensure that we retain further qualifications to accommodate the more specialist knowledge required in many areas of horticulture.

Mentoring

Mentoring was considered by most of the respondents to the survey to be the change that could have the single biggest impact in embedding excellence in their workplaces (Fig. 2). SMA shared that Longwood hosts a mentoring scheme executed in collaboration with the American Public Gardens

Association. Mentoring is widely practised as a professional development strategy in the USA, although it is less widespread in the UK. The Chair commented that the Chartered Institute of Horticulture, the UK's professional body for the horticulture industry, has a mentoring programme. GB added that Botanic Gardens Conservation International also facilitates some mentoring between gardens.

Conclusions

The use of the Q&A and polling app was successful in encouraging participation and sharing opinions from attendees in response to 'real time' discussion and raised some thought-provoking suggestions for the ornamental horticulture sector.

Horticulture staff in large and small, public and private gardens are characterised by a passion for their profession and plants, a pride in their work and a desire to share their knowledge. Panellists agreed that formalised sharing of knowledge is vital to ensure that the horticulture industry is equipped for the future. The advance of online learning, while revolutionary in expanding access in some ways, is also a challenge for the practical subject of horticulture. The skills required to achieve excellence in horticulture are best learned by doing and this is difficult to replicate online.

Four messages emerged in the discussion about aspirations to achieve excellence in horticulture:

1. Educators need to evaluate the success and reach of their programmes to all groups of learners in order to maintain standards.
2. A new vocabulary around plant science and plant care could inspire learners into the world of plants.

⁴T Levels launched in England in September 2020. These vocational two-year courses follow GCSEs and a T-level qualification is equivalent to three A levels. T Levels combine classroom theory, practical learning and substantial industry placements (a minimum of 315 hours) to ensure students have real experience of the workplace. T-Level courses have been developed with employers and businesses so the content meets the needs of industry and prepares students for work. They are designed to provide the knowledge, skills and experience needed to open the door to entry-level skilled roles, a higher apprenticeship or further study including at university. (Adapted from www.gov.uk/guidance/t-levels-next-steps-for-providers.)

3. Even more innovative ways than have been used in the past are needed to share practical skills with schoolchildren and their teachers, all of whom are increasingly accustomed to learning, teaching and socialising online.
4. Mentoring programmes should be expanded across the industry because this is a route through which people can gain experience, and excellent practices can be shared by doing.

Finally, the four panellists agreed that the most gains from their work would be made when individual organisations and the sectors within them recognised the need to work more closely together and coordinate activities.

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References

- PLANTNETWORK (2020).** Promoting Excellence in Horticulture for Everyone (video). Available online: <https://plantnetwork.org/meetings/conferences/plantnetwork-conference-2020/> (accessed April 2021).
- ROYAL HORTICULTURAL SOCIETY (2019).** 2019 Horticulture Skills Survey Report. Available online: www.rhs.org.uk/science/pdf/horticulture-skills-report/horticulture-sector-skills-survey-report.pdf (accessed March 2021).
- YODER, S.E. (2020).** Finding a green lining in the pandemic. Seed Your Future blog. Available online: <https://www.seedyourfuture.org/greenliningblog> (accessed March 2021).