COMMUNITY DIRECTIONS

Enrichment Workshops to Encourage Awareness of Employability Skills

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Abstract

A series of workshops offered to biology and health sciences students during June and July 2022 was primarily aimed to help students to understand and appreciate the employability benefits of engaging with practical science investigations. Such investigations are designed to help students develop not only practical, numerical and problem-solving skills but also skills such as perseverance, creativity and resilience which are important additional employability skills. Scrutiny of feedback comments submitted by students who attended the workshops indicated that these aims had been achieved. Side-benefits of the programme included an increased sense of community among students, and the provision of an opportunity to maintain engagement over the summer months when there is a break in module presentation for many students, leaving them in danger of losing their study momentum.

Introduction

Employability is increasingly important in contemporary Higher Education (HE). HE institutions have strived to develop and strengthen activities which relate to employability because students are increasingly and rightly interested in graduate destination data. However, employability is not always interpreted or measured in the same way by different institutions and employers (Osmani et al., 2019; Abelha et al., 2020). For example, it may relate to the ability to keep a current job or progress to another job rather than to get a first graduate job (Clifton and Kellet, 2017).

Student success in HE is dependent on a wide range of factors. The method and practice of teaching needs to support the development of appropriate skills to enable students to succeed in their studies, pass their modules and return to take their next ones, and hence achieve their study goals. Extra-curricular enrichment opportunities can add enormous value to a core curriculum which equips students with appropriate employability skills, by broadening perspectives and helping students to relate degree work to life in the outside world.

The Open University (OU) is a distance learning university where students rarely if ever meet their fellow students or tutors face-to-face, and this presents additional challenges, especially for helping students to develop practical and collaborative skills. A survey of OU biology students which explored students' perceptions of their practical skills progression and employability (Haresnape, 2022) revealed that many students do not appreciate the employability benefits of engaging with practical investigations or realise that they are

gaining crucial skills by undertaking practical work.

To help students recognise and articulate their employability, we planned a series of online workshops during June and July 2022 when students were 'between modules'. Many of the workshops focussed on tutors' experiences of working in a biology laboratory or engaging with field work in a biological context.

Workshops

The 2022 pilot programme of enrichment workshops (June-July 2022)

The series of eleven workshops took place in an online room designated for OU Science students during June and July 2022. Some focussed on biology-related jobs, with the facilitators giving first-hand knowledge of what a particular job was like (e.g. field-based job, lab-based job, and working in bioinformatics), elaborating on skills required in each case. Others focussed on a biology or health science related topic of general interest (e.g. foodborne pathogens, microbiology of fermented foods, the state of the global HIV epidemic). One tutor was appointed to coordinate the programme; she introduced the facilitator of each workshop, welcomed the students, encouraged active participation, posted the link to a feedback survey at the end of each one, and passed follow-up questions from participants on to the facilitators. There was also an online forum which was available for communication with and between students to follow-up discussions.

Attendance

Invitations to the workshops were sent by email to students after the June 2022 exams had finished. They were initially sent to those studying Level 5 (equivalent to 3rd Year undergraduate) biology modules (1446 students), who would be continuing Level 5 study the following year. The invitation was later extended to all students studying Level 4 and 5 (equivalent to 2nd and 3rd Year undergraduate) biology and health science modules (2750 students). Details of the programme of workshops were also posted on the appropriate forum for each of the biology and health science modules.

Despite the large number of students invited to attend, the average number attending each workshop was between 10 and 15. However, all workshops were recorded, and a total of 149 different students either attended or accessed the recording of at least one workshop in the programme. 32 students either attended or watched the recording of at least four of the workshops, and 6 students either attended or accessed the recording of all eleven workshops.

Feedback

All respondents to the feedback survey reported that the session they attended had helped them to understand the skills required for a particular field of work (Figure 1(a)) and also that the programme had helped them to feel part of a community of biology students (Figure 1(b)). Nearly all the responses were from students who attended the live events.

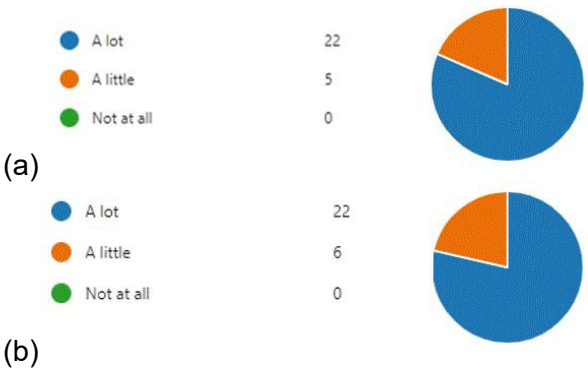

Figure 1 (a) Responses to 'Did this session help you to understand the skills required for a particular field of work?' (b) Responses to 'Is this programme helping you to feel part of an OU community of biology students?'

The free text comments indicated that the programme had been successful in raising awareness of different possible career paths for some students and had also encouraged students to relate their studies to possible future employment opportunities. One workshop on Bioinformatics appeared from the feedback to be of particular interest because students had heard of bioinformatics and were not sure what it was and/or wanted to find out more.

The 2023 programme of enrichment workshops (May-September 2023)

Following the success of the pilot programme of June-July 2022, it was expanded for 2023. The programme started earlier, in May 2023, and following a pause for the exam fortnight in June, continued through to the end of September. It was expanded to include workshops covering chemistry as well as biology and health science topics. A larger number of students were invited to attend - email invitations were sent to all students studying modules in the School of Life, Health and Chemical Sciences (approximately 6,000 students). The programme was advertised earlier in the year, and reminders were sent more frequently via an email at the beginning of each month advertising those workshops scheduled during the coming 4 weeks. Module tutors were also asked to promote the programme to their students.

The 2023 programme included a wider range of workshop topics and styles, including overviews of research being undertaken at the OU, a workshop facilitated by staff from the OU Library, a panel discussion with PhD students, and an online journal club.

A total of 22 events took place between May and September 2023. The numbers of students attending each event ranged from about 5 to 29, with an average of approximately 13. The number of students accessing the recording of each session ranged from 15 to 63.

Overall, the feedback on these sessions was similar to that from the 2022 programme, with many comments indicating that the sessions had helped students understand both the skills and the challenges involved in undertaking field work, and to consider possible career avenues they had not previously known about. Workshops highlighted many different aspects of employability - some examples are given below:

- Invaluable skills students develop during their studies and how to emphasise these in CVs/job applications and at interviews.
- Use of practical investigation experience to demonstrate not only problem solving, communication and numerical skills, but also creativity, networking and resilience.
- Resources and support available via the University Careers and Employability Services, including a professional planning tool, FutureYOU.
- The concept of Global Citizenship and what it entails in the context of Life, Health and Chemical Sciences.

In the first Online Journal Club (OJC) session, two tutors and one student each presented a summary of a paper they had read. Through leading by example, the tutors were able to encourage students to join in themselves – although OJCs at the OU are not usually recorded (New et al., 2024), this first one was recorded so that students could watch before committing to presenting themselves. 51 different students accessed the recording. Subsequent online journal clubs were held monthly but not recorded to make it less intimidating for students to participate and had an enthusiastic following of regular attendees and contributors.

The enrichment programmes of both 2022 and 2023 have been successful in helping students to recognise employability skills they are developing during their studies, particularly through engaging with practical investigations. Additional side benefits were that the workshops kept enthusiastic students engaged over the summer months and helped to create a sense of community and belonging. Developing a sense of community and hence sensitivity towards peers is important given that there is growing realisation that future graduates will need empathy as well as technical skills (Brett, 2018). Moreover, encouraging students to develop connections with their peers helps online learners to flourish, and to avoid the sense of isolation and disengagement which distance learners may feel (Thomas et al, 2014).

The number of attendees per workshop was similar in 2023 than in 2022 with events having between 5 and 29 participants, despite extending the programme over a longer period and inviting a larger cohort of students.

Tutorial participation in the OU is not compulsory, and an attendance of 10-20 % of a cohort can be the norm, even when tutorials

are part of the core teaching within a module. For enrichment workshops which are not part of the core curriculum, we would expect a lower proportion of students to engage. Yet over 200 students attended at least one live event (compared with 64 in 2022), and 443 different students either attended or downloaded the recording of at least one event (compared with 149 in 2022).

Including a greater variety of events in the 2023 programme and spreading them out over a longer period had therefore widened access to different enrichment opportunities for our students and enabled more of them to find something of interest within the programme. Moreover, since the online enrichment program has started there has been increased interest in students of contributing and building their own communities. This was evidenced by students who had participated in the enrichment sessions setting up a student-led writing journal club and a student club on biomedical science.

We suggest that similar summer programmes of interactive online enrichment events would provide valuable opportunities at other HE Institutions, for example:

- PhD students could use such a programme to practise online presentation skills by giving research talks, while also sharing their experiences with undergraduates
- Panel discussions might be effective since it can be less intimidating to submit questions online than face-to-face.
- Online events enable students to continue their learning journey whatever their geographic location, so can help UK and international students who return home over the summer feel less isolated during the long break.

We are interested in exploring the potential benefits and challenges such a programme could bring in other HE Institutions. Please contact Heather.Fraser@open.ac.uk if you would like to discuss these.

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Ethical statement

This project was approved by the OU Student Research Project Panel (SRPP).

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Note: This Community Directions report is based on the oral presentation from the Horizons in STEM Conference in Swansea, 28-29th June 2023 'Enrichment workshops to encourage awareness of employability skills', by Janet Haresnape and Ruth Gilbert