'Next slide, please': developing students' digital literacy and online collaboration skillsets

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Abstract

The setting for this case study is a second-year core module for accounting students in the business school of a modern university. We shall explain how we have used authentic, practical online experiences in the module to enhance students' employability. The business school offers a range of activities to support students as they develop the skills they need to make them more employable. In addition, we have brought an employability specialist into the module's teaching team to deliver sessions and, importantly, to make explicit the employability skills embedded in the module. This case study will show how, in an online environment, we have used a technical module on the programme to give students the experience of working in virtual teams. This provides them with an opportunity to develop the skills they will need in their future careers and to be successful in virtual assessment centres.

Introduction

The long-term employability of our students is an important issue for us and is one aspect of the University's strategic priority of student success. In addition, across the higher education (HE) sector, metrics related to the graduate outcomes of our students are included in league tables and can be used as indicators of teaching quality (Bradley *et al*., 2021), which is one reason why universities increasingly support the employability of their students through intra-curricular and extra-curricular activities. Traditionally, these activities have focused on developing students' transferable skills, such as written and verbal communication and face-to-face teamwork. However, our graduates are going to be part of a future workforce that operates in the technology-driven 'Fourth Industrial Revolution'. Consequently, Bremner and Laing (2019, p.16) "*recommend that future university teaching should address skills development with students in digital literacy, digital storytelling and group collaboration*".

Based on a survey of 18,000 people in fifteen countries, Dondi *et al*. (2021) identify thirteen skillsets which will be required by the future workforce. These skillsets are grouped into four categories: cognitive, interpersonal, self-leadership and digital. One skillset in the digital category is described as 'digital fluency and citizenship', which includes the ability to collaborate in a digital space. In their report on remote working, GitLab (2021) surveyed 3,900 remote professionals in seven countries. 63% of respondents said that they use video-conferencing when they are working remotely. Further, 48% of teams first meet online before communicating asynchronously using chat or project management tools.

It is easy to assume that our students are already digitally literate, as part of ‘Generation Z’ – proficient consumers of digital content. However, digital literacy includes the ability to communicate, work as part of a team and collaborate, all in the online environment (Blau *et al*., 2020). On the basis of a content analysis of academic articles and policy documents, Suarta and Suwintana (2021) suggest that digital business communication and digital business teamwork skills are part of the generic skillset which will be needed by the future workforce to support digital business. Therefore, Khuraisah *et al*. (2020) note that, from the perspective of employers, it is vital for employees to have effective online communication and online collaboration skills.

So far, this introduction has focused on that aspect of employability which is about whether our graduates will be successful in their future employment. However, as Tymon (2013) notes, employability is a multi-dimensional concept. Specifically, it also includes the ability of our students to gain employment. In a United Kingdom (UK) survey of 258 undergraduate psychology students, Bradley *et al*. (2021) found that less than half of students attended the careers events offered by their university. They note the competing demands on students' time, including academic work, social (including family) commitments and paid work. These can make engagement with employability services outside scheduled class times difficult for some students, particularly those who arguably would benefit the most. However, Sarkaret (2020) observes that students are more inclined to engage with an activity if it is linked to an assessment. This suggests that an important component of fully inclusive employability support includes employability skills’ development within assessed modules. This should complement rather than replace the extra-curricular activities provided by an institution, enabling more students to achieve their ambitions.

Our second-year students consider whether to apply for a placement. The benefits of a placement year for students potentially include better academic performance in the final year, the increased probability of getting a job after graduation and higher pay (Bradley *et al*., *op. cit*.). Assessment centres are an established part of placement recruitment schemes and we have seen these centres move online during the COVID-19 pandemic. Employers are now exploring a permanent move to virtual assessment centres, which are often more cost- and time-effective and enable access to a larger geographical spread of potential early career talent. It is therefore important to prepare as many students as possible for this type of digital recruitment activity. The need to increase every student's confidence in making applications for placement and, later, graduate jobs in an increasingly online environment has informed our module design. To achieve this boost in confidence, it is important that we make explicit to students the links to employability and explain how the activities they undertake on the module are preparing them for both virtual assessment centres and the future workforce.

Case study

Contemporary professional practice in an online environment

The case study discusses a second-year core module for accounting students, whose degree has a focus on information systems. The module comprises a financial analysis of companies and two assessments: a group presentation and then an individual report. In the module, we make explicit the link between the academic tasks and professional skills. 2020-2021 was the third year of embedding employability into the module, a process supported by

an employability specialist to maintain a focus on contemporary professional practice. In 2020-21, we used the enforced pivot to online delivery to enhance the development of contemporary team and communication skills, recognising that the changes to workplaces necessitated by the pandemic are probably going to be long-lasting, with remote meetings one of the most likely contenders for long-term adoption (Lund *et al*., 2021).

Working in virtual teams

The module is delivered over the spring term in twelve two-hour workshops. In 2020-21, the pandemic prevented us from running those workshops on campus and we delivered the module entirely online over Microsoft Teams, with forty-seven students split into two classes. Week 1 was an introduction to the module, incorporating the formation of the groups that students would work in throughout the module to, for example, create and deliver online group presentations. Teamwork is regularly identified as a key skill needed in the workplace (Jones, 2014) and the employability specialist focused on this during her first session in Week 2. This, an interactive session, had previously engaged students in a team-building exercise using Lego (Leopold and Reilly, 2020). In 2020-21, we needed to find a way to replicate the hands-on experience in a remote setting, while recognising the variability of students' access to digital resources. Our solution was to have the students – in virtual teams in Microsoft Teams breakout rooms – discuss an online problem based on an assessment centre exercise.

Having introduced the task to the whole class, the employability specialist asked students to go into their breakout rooms. The specialist circulated around the groups to check that everyone understood the task, was engaged and could navigate the technology. One student from each group then presented to the rest of the class by talking through a shared, co-created document. This provided a non-threatening introduction to presenting live on Microsoft Teams and introduced technical key skills, including screen-sharing and working in online collaborative spaces. It is interesting to note that for many of the students this was the first time that they had used functions such as screensharing and co-creation of documents, suggesting that the gap between being consumers of digital content and confident authors of content had not previously been addressed, despite a term of studying other modules in blended environments before the module began.

Delivering online presentations

The second session, led by the specialist during Week 3, was on delivering a good presentation. Previously, students had worked in groups to present in the classroom, using a story that they had constructed with non-culturally specific pictures (Leopold and Reilly, 2020). In the new setting online, students continued to create group presentations based on similar pictures, but developed their presentations in virtual groups and then presented them via Microsoft Teams. This time, all team members spoke: a valuable learning opportunity for them each to experience the benefits and limitations of using Microsoft Teams as presenters rather than as audience, as well as a useful reinforcement of the teamwork messages, for the students worked together to navigate any technology-related problems and support each other.

The teaching team is strongly committed to providing formative feedback, one aspect of which is the observation of mock presentations in the workshop the week before the

summative assessment. The feedback from the employability specialist, who observed the mock presentations in the breakout rooms, was not about the technical content but about the slides' design, the presentation's delivery (including the way the slides were screen-shared) and communication. In the whole-class plenary at the end of the mock presentation workshop, the specialist discussed the application of the exercise to what might be encountered in a virtual assessment centre and the module leader delivered formative feedback on the technical content of the presentations.

Discussion

To enhance the graduate outcomes of our students, the business school provides employability support, including regular employability-related events and workshops. However, some students do not engage with activities that they see as extra-curricular (Tymon, 2013). In this case study, we have shown how employability can be embedded in a technical module to support all students in developing their transferable skills. We have explained that bringing an employability specialist into the team has enabled us to emphasise the transferable skills that the module facilitates, thereby developing students' confidence in their capabilities. The employability specialist emphasises the contemporary nature and use of the skills, drawing on other students' current and past experiences on work placements, and employer engagement with the business school. This ensures that academic teamwork is seen as an experiential learning opportunity rather than a purely academic exercise, reflecting the need to match theoretical knowledge with practical workplace skills. Reference is made to the team activities which students may encounter in a virtual assessment centre and some of the things that an assessor would be looking for. In the session on presentations, the specialist points forward to the group presentation on the module and explains how online presentations are increasingly used in recruitment processes and business.

If our students are to gain the jobs they aspire to upon graduation, they must be ready to perform well in assessment centres, which an increasing number of employers intends to remain virtual. Our students will have to interact with people who are not in the room with them and such interaction may include collaborating to create presentations virtually with people whom they do not know. It is thus important to embed these activities in the curriculum and make this embedding explicit to students (Wood, 2020). The specialist therefore explained the links to employability, including online assessment centres. In terms of the module’s technical content, the activities were also designed to prepare students to work in virtual groups to create and deliver an assessed online presentation. The module leader explained this purpose of the activities. Engagement with both the assessment centre teamwork exercise and the storytelling online presentation was good: students approached both activities positively and the level of engagement from all team members (observed by the specialist as she dropped in on the virtual group preparations for both activities) suggests that students enjoyed these activities. After the group presentation, the second assessment on the module was an individual report. The final section in the report was a self-reflection on the knowledge and skills learned. In their reflections, several students commented on the benefits of having the opportunity to present over Teams for the first time, develop communication skills in an online environment and work as a virtual team.

Compared to a similar-sized cohort the previous year, the number of this group’s students who have secured placements has tripled. 21% of the 2020-21 module cohort are on

placement in 2021-22, compared to only 7% of the 2019-20 module cohort who were on placement in 2020-21. Of course, we cannot claim that the module is solely responsible for this outcome. Our practice on the module is just one part of a multi-faceted approach to employability support for our students which starts on day one of year one and includes both intra-curricular and extra-curricular elements delivered in the department and outside. However, the module has played its part in achieving this outcome.

Our practice on the module can be adopted for any module where students work in virtual groups to complete a presentation or other group project on any subject. The module group in this study is fairly small, with fewer than fifty students, but our approach could be rolled out to a larger group. Although developing digital skills, the module actually involves a straightforward use of Microsoft Teams and so staff and students need no advanced information technology skills. However, it is important that the relevance of the two 'employability activities' to assessment centres and the future workplace are made explicit to students in order to build their confidence with regard to making placement or job applications, both of which may require participation in virtual assessment centres.

Conclusion

Employability can be made explicit in a technical module, especially if one of the module team has experience in recruitment. We can extend the impact of the learning experience beyond the module into the development of future workforce skills. Additionally, the ability to come across well in a virtual assessment centre is essential, but students not used to being live on screen may often find such a virtual context daunting. By bringing an employability specialist into a timetabled module, we are enhancing our employability provision for those students who cannot always find the time to engage with extra-curricular events provided by our employability services. This is an important aspect of inclusivity, as we try to support all students toward success in virtual assessment centres and their future careers. As academics, we are now familiar with delivering sessions on Teams or Zoom and our students are used to watching us. However, that does not mean they are confident in delivering virtual presentations or collaborating in digital spaces and so we need to give them opportunities to practise. Students default to the platforms with which they are most familiar: for example, WhatsApp, for teamwork communication. As we extend their digital capabilities, we prepare students for the online recruitment activities they will encounter and we enhance their effectiveness in their graduate careers.

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