



STUDENTS AS CO-CREATORS

A Curriculum Design Collaboration

From Theory to Practice: Bringing the Clinical Lab to Life Through Video-Based Learning

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Celebrating our brilliant learner Co-Creators



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Where did our inspiration to do the project come from?

The School of Life Sciences has renewed its focus on employability. As part of this endeavour, it is important that our students develop understanding of the authentic professional skills and competencies needed for their potential future career paths.

In our BSc Biomedical Science programme theoretical teaching is excellent and well-established, and students practice relevant psychomotor skills in well designed and equipped teaching laboratory settings. However, because they are highly controlled environments, it is impossible to offer all our full-time Biomedical Science students access to working diagnostic laboratories. Therefore, it is difficult for them to gain the necessary insights into how these spaces operate and what working in them might really entail on a day-to-day basis.

Evidence from healthcare education research demonstrates that video-based learning enhances students' understanding of professional workflows, improves knowledge retention, and strengthens ability to apply theory to real clinical scenarios. Studies also demonstrate that video-based case learning improves clinical reasoning, engagement, and analytical thinking (Zhang *et al*, 2022). Video-based demonstrations have been shown to enhance laboratory skills, confidence, and learner motivation in Biomedical science students (Helle *et al*, 2021).

Alongside our full-time BSc Biomedical Science, we run an apprenticeship programme for learners who are already employed in diagnostic laboratories and wish to gain their degree to progress in their careers.

Therefore, we thought to explore the idea of inviting our apprentice learners to share their experiences of working laboratories by creating video resources that our full-time students might benefit from.

What did we set out to achieve?

We set out to produce a small batch of short, informative and engaging videos to help our full-time undergraduates gain insights into the working life of early-career-stage Biomedical Scientists.

We also hoped to get some initial feedback on the videos and potentially generate a set of simple questions with auto-marking that students might complete after viewing each video to measure engagement and understanding.

How did students and staff work together on this project?

Each teaching week of term we met once at lunch time for about half an hour, on site in a small room in New Cavendish Street. This was very tricky for all of us but most of all for our learner co-creators who only have one day per week with us as day release from their laboratory jobs. Their days at Westminster are packed full of teaching so this co-creator's project meant that they essentially sacrificed most of their lunch break each study day to work with us.

We spent the first couple of meetings exchanging information about the working roles of each of our Applied Biomedical Science learner Co-creators and honing ideas about how we might make a success of our plans.

Our initial thoughts were to commission videos from other Applied Biomedical Science students but as we discussed logistics and timelines it became clear that, for efficiency's sake, our co-creators would also be our content creators.

We shared ideas about the types of video product that might be most engaging and effective to inform our full-time students and worked through decisions about format, length and content.

We also needed to understand the sensitivities of each of our co-creators' working environments and the permissions that might be required to generate video content in these sensitive locations. It became clear that even with supporting letters from the university some workplaces were not in a position to permit video cameras into their laboratories and so not all our co-creators could make content in their workplaces. We overcame this by booking laboratory spaces here at the university for some of the videos and styling those pieces as interview descriptions of working days rather than walk throughs of techniques/equipment.

Once relevant permissions were in (where possible) and our own labs booked (where not) our co-creators made first draft videos. These were submitted to the group for actionable feedback and relevant edits were made.

Zara and Luis were able to make videos at work. Zara's ten-minute video shows her working in a tissue culture laboratory. Luis' piece shows us to how he sets up the Roche cobas® analyser machine. Lauren's four-and-a-half-minute video focuses on her Point-of-care testing role and explains how she works with both machines, samples, colleagues and patience. Kirti and Nat made a pair of reciprocal interview videos, each about five minutes long, in which Nat describes her role in a microbiology laboratory and Kirti explains his work as a trainee Biomedical Scientist in a therapeutic drug monitoring lab.

Please feel free to watch our videos here: [SCC 2026 Bringing the Laboratory into the Classroom - Videos](#)

Once final copy was in, we designed a short questionnaire about the videos and recruited three beta-testers from our Biomedical Science Masters course who watched all the videos and responded to our questions (**Our grateful thanks to Namir Kubba, Xhoana Elezi and Oluchi Offia**)

What kind of impact do we anticipate that our work might have on learning and teaching going forward?

We expect these videos to enrich the understanding of our current full-time BSc Biomedical Science students with respect to early career pathways in Biomedical Science. We hope that they spark interest and generate questions. We hope that they help our current students to think more deeply about careers on Biomedical Science and/or cause them to consider and explore what else they might like to do with their qualification, if the things that they see in these videos do not interest them.

We also hope that the videos will inspire some of our newer Applied Biomedical Science learners to want to make similar videos for us about their workplaces (there are many, many areas yet to be covered!) and possibly even some of our alumni who are currently working as Biomedical scientist in laboratories across the UK and in diagnostic services abroad.

In general, we anticipate raised awareness amongst our students of what Biomedical Science is and what Biomedical Scientists do.

What lessons did we learn from working in partnership?

Lessons learned from the doing of this Co-creators project were possibly all known before, but none deeply felt enough.

We learned that we needed more lead time than previously anticipated to create video content of this kind. In future projects of this kind time must be built in for permissions and negotiations with employers. We also now understand that we must support each other better with early testing of sound and video equipment quality and user ability/knowledge and with access to and use of video editing software.

We learned that the project was even more needed than previously realised. Our faculty co-creators began to understand just how many more videos we could make to describe the various roles within different disciplines of Biomedical Science in the UK. Even our learner co-creators were not very aware of each other's job roles.

We learned that successful completion of this Co-creator's project is a beginning. We must consider carefully how best to deploy the excellent and precious resource that our learner co-creators have given us. The academic team will decide when and where to deploy this resource for greatest positive impact and how to encourage engagement. They will set up a blackboard discussion around it and finalise a short set of questions to be deployed at the end of each video and a closing set at the end.

This work increased our respect, admiration and gratitude for the important work done by our Applied Biomedical Science learners, for their dedication and diligence as they manage full-time work and a demanding undergraduate degree. We learned more about their schedules and the importance of planning timings well in advance and, once agreed, being reliable in sticking to them. This experience has further strengthened the resolve of the faculty members of this co-creator's team to work on smoothing out assessment bunching for this cohort.

We gained valuable feedback from the three beta-tester MSc students recruited by the Co-creator's team. None of the videos scored less than a 7/10 from each of our testers but there were lots of comments made about how we might improve which can be used when/if we make more in the future. A quote from each beta-tester can be seen overleaf.

“The five videos give a very clear overview of the different disciplines and what type of work is required, the regulatory environment and a reasonable idea of daily life in those roles. Very useful in a rule in/out capacity, if you like strict routine, you will get that working with automated analysers is for you, if more variety in the day or less rigid routine or the unexpected appeals more then a role in Point of Care testing could be for you.”

Namir (MSc Biomedical Science – video beta-tester, reporting on all 5 videos)

“It gave a sense of meaning and purpose to a medical microbiology career and it was really engaging.”

Oluchi (MSc Biomedical Science – video beta-tester reporting on the video of Kirti interviewing Nat)

“I liked how he (Luis) mentioned all the steps of cleaning and he showed us footage on how to do the cleaning and maintenance”.

Xhoana (MSc Biomedical Science – video beta-tester reporting on Luis’ video of the cobas® system).