

# **Working in partnership with students for assessment topics in postgraduate education: lessons from physiotherapy education.**

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## **Introduction**

Student-led assessment encompasses a variety of practices through which students are actively involved in their own learning and assessment processes. It was first documented in 1938 by John Dewey, who coined the phrase 'progressive education' as a move away from didactic, teacher-led education towards a more social/context-oriented model. At its core, student-led assessment aims to empower students to take responsibility for their own learning, and the learning of their peers. This might include peer feedback (Lui & Carless, 2006), group portfolios (Lopez-Pastor et al, 2010), or co-creating a database of multiple-choice questions (Harris et al, 2015). Much of the research into student-led assessment is focused on formative assessment that does not carry a mark or module weighting, often as part of a broader student-led pedagogical shift (Rowley et al, 2017). Indeed the 2015 Standards and Guidelines for Quality Assurance in the European Higher Education Area (Standard 1.3), states that universities "should ensure that programme are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach" (ESG, 2015).

The UCL 'Acute Cardiorespiratory Physiotherapy Skills' module is delivered across a 6 day programme, .Learners on the programme are post-registration postgraduate physiotherapy students. Most work in a specific subspeciality within the cardiorespiratory field, either locally or overseas. The module is assessed by a written, case-study based exam. The module lead (an academic with expertise in cardiorespiratory physiotherapy) sets the exam paper, with input from external lecturers who have contributed to the module. It is sent to the external examiner for final amendments and sign-off In 2020-21, 11% of students reported that they felt the exam topics that had been selected were somewhat removed from their own clinical reality, involving scenarios they were unlikely to see in their own practice. The challenge is that each cohort is diverse (in terms of area of specialism and country of training) and it is impossible to predict the clinical expertise that each student will bring to the module. To address this, we designed a student-led collaborative exam preparation session, which sought to better understand students' own clinical environments (e.g. community, hospital or school setting), specialty areas (e.g. intensive care, surgery, long-term ventilation, palliative care) and patient population (e.g. asthma, chronic obstructive lung disease, burns, neuromuscular conditions). This was used to guide and inform the content of the written assessment.

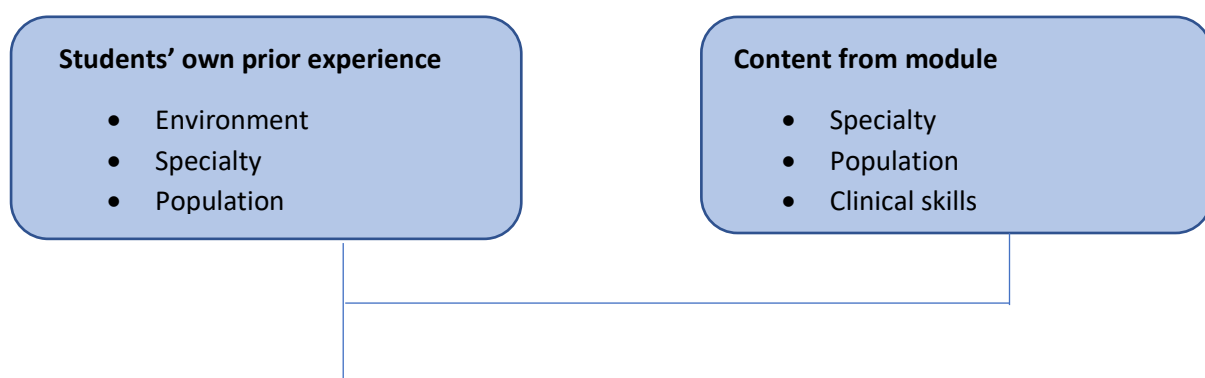
## **Development of a student-led collaborative exam preparation session**

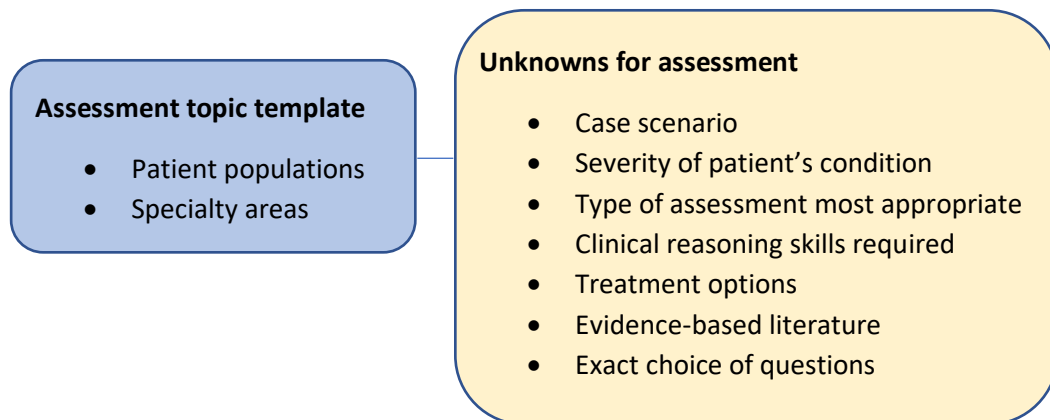
There were 26 students on the module (7 male, 19 female), 15 of whom came from the UK, and the remaining from Singapore, Saudi Arabia, India, New Zealand, Oman, Italy and Ireland. All were qualified physiotherapists. The exam preparation session took place on the final afternoon of the module, by which time the group were relaxed with each other and the group dynamic was one of peer facilitative learning. We began the session by explaining details of the exam process. This was a three- hour, unseen written exam. It was conducted online, and students had access to module resources, online content, books and their own notes. The exam consisted of five clinical case studies, each with three accompanying questions. Students could choose to answer all questions from any three of the five case studies. It took place four weeks after the end of the module.

It was important that all students felt comfortable to share their experiences and views. Following this introduction, we invited students to discuss their own clinical experiences. This was deemed to be a good starting point, because there is no 'right' or 'wrong' answer, everybody's background is equally valued. It helped to create an open, supportive environment. To direct the conversations, we suggested that students consider three different aspects of their clinical work; clinical environment, specialty areas and patient population. Students discussed their clinical experiences in pairs first, to encourage participation, and then fed back to the rest of the group. We compared and contrasted each other's clinical lives and recognised the richness of collective experience in the diversity of the group.

We then turned to the module content. For each timetabled lecture, we encouraged discussion as to how relevant this was to the students' own clinical practice, how likely they would be to use the information clinically and whether it would be helpful for students to spend time revising this topic in preparation for the exam. Students were discouraged from making personal observations about the quality or delivery of the lecture, but to focus on how well each topic would inform their clinical practice.

At the end of the session, the students summarised what they felt to be the most important assessment topics to have come from the open discussion. At this point, the students were informed that the exam would be based on the discussions that had taken place. A template of specific assessment topics was then released one week before the assessment. Since students would only complete three out of five case studies, they were able to further tailor their revision towards the most clinically applicable areas. Although they knew the specialty areas and patient populations that would be included in the exam, the assessment was still considered 'unseen' since each case study could refer to a wide range of presenting conditions, and the students were unaware of the specific questions relating to each case (Figure 1).





**Figure 1:** Process for discussing and selecting exam topics

### Findings and feedback

In comparison to exam results from previous years, the average remained similar. However, unlike in previous years, all students passed, and some students accessed the higher marking range (table 1).

**Table 1:** class average and marking range for module – a comparison between three years.

	2018-19	2019-20	2020-21*	2021-22
Average	64	62	X	65
Minimum	42	40	X	50
Maximum	72	74	X	82

\*The 2020-21 exam took a different structure, owing to Covid restrictions

Student feedback was constructive, with 65% of students (n=17) completed the module evaluation. Details of module evaluation are summarised in the table below.

**Table 1.** Summary of module evaluation. Only questions relevant to the exam preparation session are included

Question	Responses		
<b>How well were your views listened to in the exam preparation session?</b>	Not at all N=0	Somewhat N=4	Fully N=13
<b>Did the exam content reflect the discussions that were had in the exam preparation session?</b>	Not at all N=0	Somewhat N=1	Absolutely N=16
<b>How did the exam preparation session help with your revision?</b>			
<ul style="list-style-type: none"> <li>Helped direct study in the final week before the exam</li> </ul>			
<ul style="list-style-type: none"> <li>It helped me learn greater detail of conditions etc. However I still felt there was a lot to cover. And although “long term ventilation” or “ECMO” wasn’t on the list, I still had to thoroughly learn these as they could have been a treatment option for a case study.</li> </ul>			

<ul style="list-style-type: none"> <li>• It allowed us to narrow down the revision and prepare adequately. In doing so, it also ensures our learning and revision were holistic.</li> </ul>
<ul style="list-style-type: none"> <li>• Helped focus attention as skills is a large topic</li> </ul>
<ul style="list-style-type: none"> <li>• Given the immense amount of information available on any given topic/module, allowing students the chance to narrow down on certain topics was extremely helpful. It personally helped me to provide more focused answers with in-depth knowledge on the topic, rather than revising absolutely everything and only being able to provide superficial knowledge on many different topics (given time constraints).</li> </ul>
<ul style="list-style-type: none"> <li>• I felt more at ease that I could prepare for extensively for the topics, reduced anxiety around the exam.</li> </ul>
<ul style="list-style-type: none"> <li>• Enabled me to focus on a few key areas</li> </ul>
<ul style="list-style-type: none"> <li>• Helped a lot, made studying a lot easier and more focused</li> </ul>

Students felt at least somewhat listened to during the exam preparation session, and could see a clear link between the in-class discussions and the final exam paper. They could see the advantages of having a clear focus to their revision time, reducing anxiety and making best use of their time. Students stated that their revision was more meaningful to their clinical practice. Whilst the exam still remained stressful for some, most students still found the exam to be a positive experience (Table 2).

**Table 2.** Summary of additional comments from module evaluation

<b>Do you have any further comments about using student-led discussion to inform assessment topics?</b>
<ul style="list-style-type: none"> <li>• I think it was important to leave it till the last week to release the topics to ensure that further learning was spread across all areas</li> </ul>
<ul style="list-style-type: none"> <li>• I have to say I quite enjoyed the exam! There were no nasty surprises and I felt like I could combine both my clinical expertise with what we'd learnt on the module. Thank you for making it not too painful.</li> </ul>
<ul style="list-style-type: none"> <li>• I work full-time as an ICU physio and I have a young family. Revision has to have a purpose beyond the exam otherwise I am just not motivated to fit it in at all. Being given the chance to say what revision topics I wanted was super helpful.</li> </ul>
<ul style="list-style-type: none"> <li>• I found revising for the exam and exam morning quite stressful, because there was so much to learn. However once in the exam, I found it really enjoyable, and enjoyed the questions. I found it challenging but a nice way to show off knowledge.</li> </ul>
<ul style="list-style-type: none"> <li>• I thought this was a very interesting way to assess the students. I think we are shifting away from the traditional method of assessment and this is a brilliant start by allowing students to take ownership in not only their learning but also their revision</li> </ul>
<ul style="list-style-type: none"> <li>• Definitely keep doing this. Exams shouldn't be scary, they should help with learning!</li> </ul>
<ul style="list-style-type: none"> <li>• I liked to feel involved in the exam process. I felt our views were taken seriously.</li> </ul>

- Asking students what topics they would prefer on the exam allows us to have a more meaningful experience in our learning, as the topics chosen would be more relevant to what we can bring to our clinical practice.
- Great idea. It feels more applicable to our clinical practice, as most people will feel motivated to want to learn things that are relevant and interesting to us.
- It made the exam more enjoyable as I felt ready for the exam.
- I think it is really useful as it also means that it's possible to make the module more clinically relevant for your area of practice, obviously there will always be a wide range of experience/ specialties but as much as possible this was really helpful. I will never not find exams stressful and anxiety inducing but this did help.

**Which of the following words best describe your exam experience?**

*Stressful, Negative, Anxiety-inducing, Challenging, Relaxing, Positive, Motivating*

A word cloud where the words are of varying sizes and orientations. The largest words are 'challenging' and 'positive'. Other words include 'stressful', 'anxiety-inducing', 'relaxing', and 'motivating'.

**Reflections**

Assessment is important for postgraduate physiotherapy education. Students who pass the ‘skills’ module are permitted to progress to clinical placements, where they will be expected to assess and treat patients independently. The exam paper provides an indicator of clinical competence. We require students to synthesise a large amount of information from the module and combine it with their own clinical expertise to demonstrate advanced clinical reasoning skills tailored to specific patients. These are the skills that will allow them to thrive on placement. Involving students in the choice of assessment topics, does not advantage them in terms of how they apply their knowledge to a case (it is noteworthy that most students still found the exam ‘challenging’). But it does allow them to focus on the topics that matter most to them during their revision period. We want to support our postgraduate students to become better clinical physiotherapists delivering the best possible patient care, so studying topics that have direct clinical applicability is hugely beneficial to both them, and their patients.

Our students are adult learners, with real-world clinical experience that allows them to contribute fully to taught modules. Student-led assessment empowers the students to take responsibility for their own learning, allowing them to set their own agenda for revision and further study. Such approaches are strongly associated with self-regulated learning strategies, which are vital for encouraging the life-long learning required in an evidence-based profession such as physiotherapy (Makkonen & Jaquet, 2020). In the UK, postgraduate physiotherapy education is not linked to a pay increase or promotion. Students attend to increase their skills and knowledge, for the direct

benefit of the patients they treat. Therefore, giving them autonomy over their assessment topics celebrates their own clinical experience, and encourages active engagement in the revision process.

We were concerned that group dynamics would result in some students dominating the discussion and dictating assessment topics, whilst others would not feel able to express opposing views. The module lead has expertise in focus group facilitation and ensured that all voices were heard. Students could also add comments to the online message board, if they did not feel confident to vocalise their opinions. Giving a clear structure to the session, and beginning with the non-confrontational topic of personal experiences, helped students to feel comfortable voicing their opinions and preferences. There were also queries over whether students would narrow their revision too much, and not appreciate the breadth of knowledge required for the clinical specialty. However, the final assessment topics template was only released in the final week before the exam. Students could direct their studies broadly towards the student-led discussions during their self-directed study period, and then focus on key areas in the last few days.

## Conclusion

It is feasible for students to contribute to exam content for summative assessment. Students respond positively when asked to engage as partners in exam preparation. This takes some of the stress out of the revision process, and ensures that students' clinical learning needs are closely aligned with exam content. As a result, the time taken to learn and understand clinical topics has benefits beyond the assessment process, as it can be directly applied to the students' professional practice.

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