



# CASE STUDY

Implementing and evaluating a new eportfolio based learning approach for observing, assessing and tracking competence in a live Optometry clinic setting

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PEBBLEPAD CASE STUDIES

**STORIES OF INNOVATION TOLD BY THOSE CHARTING NEW COURSES IN LEARNING, TEACHING AND ASSESSMENT.**

## THE CONTEXT

To register and practice in the United Kingdom as an Optometrist or dispensing optician the General Optical Council (GOC) requires students on approved programmes to have demonstrated they are clinically competent against a defined range of core competencies and have achieved a specified number of 'safe patient experiences' (episodes). This requirement is ubiquitous within health education (Peacock, Murray, Scott & Kelly, 2011), as is the established use of eportfolios as a means of evidencing professional practice (JISC, 2008). ePortfolios provide practical benefits in terms of record keeping and progress tracking, becoming an ever-present means of identifying risk and failure (Lawton & Purnell, 2010) but also an effective means of offering commentary on evidence (Curtin & Cowan, 2010) and learner reflection (Knevel & Down, 2017).

At the Centre for Eyecare Excellence (CEE), situated on the University of Plymouth campus, students are observed by their tutors attempting clinical competencies and patient episodes throughout the academic year. Progress, along with tutor feedback and student reflection, is recorded in standardised logbooks. There are 39 core competencies split across six clinical areas, with an attempt within a clinic being assigned to a Clinical Episode. Episodes involve real patients and are meant to be as close to an actual clinic as possible, in terms of process, practice and professionalism.

## THE PROBLEM

Previously, all recording and evidencing of clinical competencies and patient episodes was carried out using three paper logbooks that had to remain in the clinic. While students were free to view and take notes from logbooks, this had to be done on site at CEE, limiting the students' access to their feedback and making it very hard for them to track their progress and take control of their learning. Equally as challenging was the ability of the academic staff to track individual and cohort progress against targets and identify students who may require extra support. The only way this could be carried out was through periodically reviewing and transferring information from the paper logbooks on to a spreadsheet, which was a time consuming and resource intensive process, at risk of error.

## THE APPROACH

Working together, the Digital Education team and the Optometry Programme team designed and created a new eportfolio approach to assessing clinical core competencies and patient episodes in a clinical setting using iPads. Separate workbooks were set up for tracking and recording student performance against core competency criteria and patient episode numbers. Performance against set competency and episode criteria was easy to record in a live setting on an iPad through making use of the table and rubric features of PebblePad. This, combined with carefully positioned radio buttons and drop down boxes, allowed selection of patient demographic information for each competency and episode attempt to be recorded, which is a requirement of the regulatory body.

With this design, tutors were able to assess clinical performance on the spot and record feedback that was instantly accessible to the student following their clinic. As a follow on, the same approach has been adopted for the Optometry placements across all 3 years of the programme, so that external assessors can give feedback on the placement experience remotely. In future iterations of the workbooks the clinic team may also look to make use of additional PebblePad features to record audio feedback and add photography evidence to enhance both student and tutor experience further.

## THE RESULTS

Students benefitted significantly from this new approach and were able to access feedback from anywhere within 24hours of the clinic happening. This enabled them to take more control of their learning by reviewing and reflecting on their feedback and being able to use the built-in progress tracker to gain real time evidence of their achievements.

The Programme Leader feels that this enhanced student experience and contributed significantly to the increased 'National Student Survey' (NSS) scores that the programme achieved in 18/19, which saw the 'assessment and feedback' satisfaction score rise by 22% to 82% and the 'overall satisfaction' score rise by 23% to 98%, ranking the programme in the top two in the UK for Optometry. The NSS is a high profile national survey completed by all final year undergraduate students in the UK. It gathers opinions from students on their time in higher education and is an influential source of public information that feeds into a wide range of programme metrics and rankings.

The impact on the clinical management team has also been significant, with the reporting features in ATLAS revolutionising the tracking of student progress and simplifying the auditing process. As a result, the clinic management team now have more time to focus on patient care and the future direction of the clinic.

One unforeseen benefit of this new approach is that it has also allowed the programme and clinic team to target the training and development of the clinical tutors, in particular with regard to consistency in marking and feedback, through review of the use of the eportfolio between individuals.

The success of this third year experience has meant this approach has now been scaled across the whole Optometry programme, including year one and year two clinical assessment and practice placements.

## **LESSONS LEARNT**

The biggest lesson learnt is that simple is best. The team did manage to evaluate and simplify processes with the move from a paper-based system to the digital platform and this helped to make the platform as user friendly as possible. PebblePad has been a brilliant tool for this project, but it has been pushed to its limits and the project has challenged its capabilities to a certain extent. There are some features of the platform that can make it challenging to use, particularly in a live clinical setting. For example, there is no automatic saving of any information entered and there is no capacity for 'pop ups' within a page or 'pre-filling' of information once it has been inserted somewhere else. This can lead to a degree of repetition and a lot of scrolling down the page when it is in live use on an iPad. However, whilst a little frustrating, these things have encouraged thinking outside the box, and strategies have been modified to accommodate this where possible.

## **IN BRIEF**

- Planning to move from a paper to a digital system gives you a good opportunity to question your existing systems and procedures and think about whether there are simpler ways of doing things.
- The transparency and accessibility of feedback that digital systems provide have far reaching effects on student experience, teaching and learning.
- The reporting features within PebblePad can work very effectively. It is important to consider what reports or tracking information is needed early on so that the eportfolio can be designed in a way that allows this information to be easily extracted.

## REFERENCES

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