PebblePad in the Operating Theatre – a good prognosis.

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Theme(s)

Learning: Reflection, Employability
Teaching/Professional practice: Managing e-Assessment
Organisation: Student Satisfaction, Cost Saving, Environmental Impact, Managing Organisational Process

The background context

An Operating Department Practitioner (ODP) is a person who works in and around operating theatres. Their role is to provide skilled assistance to surgeons and anaesthetists in carrying out intricate and complex procedures and work alongside healthcare professionals in order to provide a high standard of patient focused care throughout a patient's operative journey.

The role is primarily focused behind the closed doors of the operating suite and as such ODPs are an unseen and relatively unknown group within the hospital environment. In total in the UK there are less than 11,000 ODPs. It is a very specialist role which has developed as a profession allied to health. Most people assume that individuals working in theatres are nurses; however this specialist role is also technical in nature and brings a different professional into the perioperative environment working alongside surgeons, anaesthetists and nurses. It could be considered as an advanced technical, caring role.

It is in this context that a diploma programme is run in the UK for the National Health Service (NHS) via higher education institutes. In total there are over thirty programmes with student numbers varying from 10 to 100 per institution. This results in approximately 700 trainees per year.

At the University of Surrey we have an intake of approximately thirty-five students a year. The programme is made up of both theoretical and practical components. The student has to demonstrate an achievement of a minimum of 3000 hours. Sixty per cent of this time is spent in the clinical practice area, specifically in theatres.

As the majority of the students’ time is spent in practice and away from the University setting, the partnership between the University and the individual NHS hospital trusts is paramount. It is important that the student is well supported from all angles. Students will be placed in the operating theatre, anaesthetic and recovery areas.

As part of the assessment process our colleagues in practice are required to mentor and supervise these students. The mentors are all qualified, registered practitioners. It is part of their role to ensure that the student is fit to practice and has achieved a level of competency that ultimately will allow them to be registered as an ODP by the registering body, the Health Professions Council (HPC).

Why PebblePad?

- Timely feedback
- Ease of submission – no travel costs
- Window to the world
- Streamlined administration

The purpose

As part of the assessment process the students are asked to reflect on their progress. Each placement lasts from six to sixteen weeks, so during that time they have many experiences which to rationalise and reflect upon.

In the past, reflections were captured on paper and were generally written by the student towards the end of their placement. This had the disadvantage that the experience was not current and it placed a lot of work on a student at the end of the placement when actually completing clinical competencies was paramount.
Reflections are also required to be verified by the mentor. This serves two purposes: firstly to ensure that the student has valid experiences; and secondly to act as a discussion and development tool between the mentor and student. This verification also ensures that the experiences the student writes about are true experiences and not fictional. In the past this has placed a lot of work on the mentors and the students to ensure this is completed in a timely manner ready for submission.

Following completion the student had to physically submit the paper to the University. University tutors would then review and mark the reflections from an academic viewpoint. This became a long, laborious process which meant that the student would not get any meaningful feedback for up to eight weeks, by which time the student was well into their next task and therefore was unable to learn from any mistakes that they had made.

This was the initial driver for the PebblePad project, however many more benefits were realised.

The approach

The initial project scope was to simplify, process, and speed up feedback to be more timely. PebblePad was selected as a relevant tool that would enable this redesign to an eportfolio.

The format of the reflection was changed to a reflective blog to encourage students to reflect as events happened rather than many weeks after the event. The blog was then automatically shared with the mentor who could then verify the information whenever they chose to do so. The other big advantage of this was that University tutors could also see the information at the same time and choose to comment as well.

This gave a much better way of collaborating and enabled timely interventions so that progress could be better monitored and modified. All parties could then contribute to the student’s education and experience.

The result

The initial reason for choosing a system like PebblePad was to speed up feedback and to develop the process which had become overly burdensome on paper.

In the end we developed a system which accomplished all of these objectives. There was also an added advantage that we were able to steer students in the right direction at the right time.

Often mentors have to supervise students in addition to doing their usual day to day tasks, causing conflict as mentors found it difficult to dedicate enough time to look at the written reflections. However, having the reflections available online allowed mentors to view them whenever and wherever they wanted. Similarly, the University tutors would normally not have seen the information until well after the event. This new way of working allowed them to view the reflections as they were written.

Another consequence was that traditionally the students had their feedback delivered via paper which meant a trip to the University. Many students are placed in trusts a long distance away from the main campus (up to 40 miles) and it is a costly journey to pick up a piece of paper. We had considered an email solution however this was not scalable and would have resulted in an administrative burden. The ability to give feedback online immediately to the student is very powerful and has now become ingrained into the experience of the student.

A further advantage is that it allows the student to take the information with them when they graduate and register, and can act as powerful evidence when job seeking.

The impact

Students have to complete evaluations about the programme for audit and quality purposes. We have integrated form builder into the process and students now submit evaluation forms online via PebblePad. The use of PebblePad has featured heavily in these evaluations in a very positive manner proving that we are providing a better student experience. In particular they value the timely feedback that we are now able to provide. They also appreciate the ease of submission, equating this to a reduction in travel costs.

This new process has also helped the collaborative nature of the NHS/University partnership with mentors reporting that they feel more engaged with the students’ education. It has helped to maintain our list of live mentors which traditionally has been difficult to monitor.

Finally it has streamlined administration for the tutors and exams and registry teams, freeing up much needed time. Estimated savings are an hour per student.

Lessons learnt

Prior to piloting the programme it was established that NHS firewalls are notoriously strong and could block access to PebblePad. However it was found that this was not the case. The main problem encountered was that the NHS computer framework in some trusts is not modern and so using a graphically rich based solution such as PebblePad put a strain on the infrastructure and the experience was sometimes slow.

It was found that the general level of computer literacy within the theatre environment was variable and some initial education was required for mentors.

There was an extra administration burden that had to be managed. This related to the creation of external accounts for the mentors, and technical support for the students when they failed to send the required work to the correct gateway, the space used by mentors and tutors to view the student work.

As with the implementation of any change, we found much more resistance from existing students who were used to the old paper based system than from new students. This was not a failing of PebblePad but the management of change and so we ensured that more training was available with subsequent cohorts. When the benefits of this new way of working were fully realised the resistance dissipated.

Several other issues were encountered and eventually overcome:

- A new process was required for delivering information to the external examiners – this was outside of the normal established processes.
- If a student interrupted the course for a while and then came back within a different cohort, we had to manually adjust the system to cope with this.
- Students needed guidance in terms of the length of blogs required. Some students so enjoyed creating them that far too much time was spent on them and we needed to educate them on the required length and depth of content.
The future

The success of the programme has been measured by far greater student satisfaction, with the majority highlighting the use of PebblePad as a major contributor. They have also appreciated the time and cost saving in not having to physically submit and pick up work. The use of the blog within PebblePad is now a well-established process within the operating theatre team at the University of Surrey and forms the mainstay of graded assessment in practice. It has been a very beneficial solution to the problem and has been embedded as good practice within the University. The challenge is to expand the project out to other areas within the faculty such as nursing and midwifery students. This is planned within an updated curriculum and as new processes come online we plan to integrate into these programmes with a full complement of around 4000 students.

It has helped that we are located in the same building as the University team that helps to develop and promote the introduction of new technologies throughout the University. This has meant quick and easy access to support when technical and educational issues have arisen. These have been solved promptly, ensuring that students, mentors, and university staff have a good response and experience with the product. This has allowed us to focus on the education issues rather than technical issues.

PebblePad has been a bold step for the Operating Department team to allow collaboration between geographically diverse education providers. This has enabled development and engagement of the student and enhanced the students’ experience and has allowed us to drive the development of their abilities to ensure that the end graduate is ready for immediate employment after graduation.

In brief – making the case for PebblePad

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