

Midwifery students' experiences: Real time, real benefit, real deal

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Chosen theme(s)

Program curriculum

Institution agendas

Professional learning and accreditation

The context

Midwifery students are required to provide evidence of clinical experiences to be able to register as a health professional with the Australian Health Regulation Authority. The evidence is collected in the form of a paper based portfolio. The accreditation standards as set by the Australian Nursing and Midwifery Board include 100 antenatal visits, 100 postnatal visits, 40 births, 40 complex cares, and 20 continuity of care experiences. The continuity of care experience involves following a pregnant woman through her child birth period for approximately 20 hours. The standards are currently under review.

ECU provides two entries into midwifery; a post graduate Masters degree and the four year dual nursing and midwifery degree. Students commence collecting evidence from the first semester through to the last year of their course. During the course students are expected to demonstrate learning and application of knowledge to clinical situations through reflections.

The documentation of clinical experiences is a condition of the registration authority who may request the evidence for an audit. It was recognised that PebblePad could fulfil the recording requirements and in addition provide a platform for supervision and assessment of experience and reflection. However, we are finding other more tangible benefits can be realised with the software which will give our students much more than a digital portfolio.



How it was ...

Currently the midwifery students record their clinical experiences in a paper format. Two lever arch folders are supplied to the students; one for continuity of care experiences, and the other for all other experiences. The experiences obtained during continuity of care visits may also be counted towards the number required for antenatal, postnatal, births and complex care. Filing of records becomes confusing for students as visits with one woman involve a variety of experiences.

Safety is a concern when using a paper based system. Students are required to carry their portfolio in order to complete relevant paperwork. These folders become very heavy to transport. Confidential and sensitive information is recorded in the portfolios therefore students must ensure they are only seen by authorised people. Paper based portfolios are irretrievable when lost or damaged. With PebblePad the information can be entered into the student's Pebble+ account during clinical placement using an iPad or other mobile device.

The approach

At first the requirements seemed quite simple, the migration of a paper based system into an electronic portfolio. However the more we learned about what the software could do, the more we wanted to do. The approach we have built combines almost all of the main features of PebblePad and ATLAS and has produced a model that is integrated throughout the whole course and starts on day one of the students' studies.

The first area to be developed was the forms that the students are required to fill in whilst out on practicum. They were created with the template builder and great care was taken with the design so as not to mimic the existing paper forms but improve them utilising the rich tool set provided in PebblePad. Standards were defined so that they all followed a uniform approach in terms of heading sizes and formatting and coloured fonts were used to reflect the same colour as with the paper based system. This was to make students who had used both systems feel immediately familiar with the forms. Automatic tagging was set up on the forms so that every time a student filled one of the many different antenatal forms it was automatically tagged with 'antenatal' irrespective of the name of the form. Every time a new born form was completed, it was tagged with the words 'new born' and 'birth', making it easier to find and group for the accreditation standards as set by the Australian Nursing and Midwifery Board. The students are also prompted to tag the forms manually with the woman ID. If the woman happens to also be a part of the continuity of care experience the student will identify them with a 'CCE' tag.

The next part of the model was to create a PebblePad Collection to track the forms related to each continuity of care experience. A collection was set up for each woman and using the 'Set Criteria' option we were able to have any forms tagged with the woman ID automatically added into the collection.



This means that when a student is filling in the forms on their mobile device the forms related to that woman are being digitally filed and stored without them having to do anything.

Once a collection for a woman is set up it will be added to a PebblePad Activity Log. The Activity log will stipulate that the students needs to have completed 400 hours continuity of care as part of their registration process and as hours are added to each woman's collection (20 hours for 20 woman) they will see their target hours reducing.

It is important to also point out that every form that is completed by the student also has the facility for an electronic signature to be signed by the supervising midwife directly onto the mobile device. This means that the form has been verified by a clinical preceptor in real time.

The workbook we have created allows all of this information to be collated together. The evidence provided by the student can be monitored but more importantly verified by a lecturer or external clinical supervisor via the ATLAS workspaces. This evidence can be viewed in workspace reports in the format of a pie chart. The completed workbook can be sent as a published link to the Australian Nursing and Midwifery Board and could also be used as sample work towards course accreditation.

The reflection component of PebblePad has been proven in other disciplines but to be able to link forms created to a specific reflection for an assessment was the final piece of the puzzle.

How it is now

Although we are very excited, the new PebblePad portfolio is still in the development stage. A panel of midwifery students tested the on-line portfolio at the university. Students were unanimous in that it would be a great improvement compared with the current paper based system. Suggestions were made on how to improve the presentation. Student's voiced that they particularly valued the "hints" that could be provided within the PebblePad templates to help with learning.

The on-line portfolio will be trialled in the first semester in 2014 during clinical practicum. On site Clinical facilitators will receive training prior to the trial. The intention is to evaluate the current paper based system against the PebblePad portfolio. Feedback will be obtained from clinical facilitators and students.

The benefits

From the students' perspective expected benefits include time saving, formative and early direct feedback from lecturers, a less confusing filing system, ability to use the same piece of evidence for multiple purposes, in built structured reflection templates, and they will leave with a tangible asset that they can use for future opportunities and employment.



Also they do not have to worry about the inherent problems of a paper portfolio –carrying around huge files and the risk of loss.

Learning could be enhanced with the use of confidence scales within the templates. For example, the accuracy of a student's assessment of a woman during the antenatal period can be confirmed during an assessment performed later in the child bearing period.

The templates are able to include definitions of terms within the hints area. This is difficult to replicate in paper based formats. Terminology is difficult for students to grasp in their earlier years, and this process will reinforce their learning and familiarity with midwifery jargon.

Lecturers are able to provide timely feedback to a student who requires guidance early in, and throughout, the semester to ensure they understand and stay on task. Reflections will be a major component of the portfolio which will require critical thinking by the student and guidance from the lecturer or clinical facilitator. PebblePad allows quick access to modification of already distributed learning materials. This is particularly useful when the registration authority enforces the new standards.

Benefits to lecturers include monitoring student performance for a particular cohort or the whole course with the use of powerful reporting in ATLAS. Also within ATLAS the power to verify at 3 levels that the evidence provided meets a certain standard means that we can start to prove that authentic learning has taken place. The recently developed PebblePad digital signature feature ensures that clinicians and lecturers will be able to be confident that the experience has been validated.

Benefits to the institution include cost saving as paper and coloured ink are no longer required. The students will also save money on these consumable items. There are benefits to the environment due to reduced paper use.

Lessons learnt

In December 2013 students were invited to view the PebblePad Midwifery Student Portfolio and give comments. Some of the very junior students had a limited knowledge base and required more detailed definitions. For this reason the junior students (first year) will not be part of the trial in May. The final year students wished the portfolio had been available for them in the previous years but felt they would be too busy in their final year to be involved in the pilot. As a result of the feedback from students it has been decided that only the second and third year students from the four year Dual Nursing and Midwifery Course will be invited to participate in the Pilot in May 2014.



One of the anticipated challenges is the availability of iPads. Many students have them and for those that do not the School of Nursing and Midwifery will have a small number available. These iPads will be distributed to the clinical facilitators and the students will use them under their supervision. A problem may be encountered during clinical experience when a student may be prevented from accessing PebblePad due to the health care facility firewall restrictions or on rural placement with poor WiFi signal.

A further area we may want to venture into is the ability to 'lock down' changes to a form once a digital signature has been applied. Although cases of fraud are very rare this would effectively eliminate it. However we understand the issues in trying to stop changes to what are effectively the students own assets.

In brief – personalising the curriculum

- The evidence that theory is transferring into practice for students is more evident
- Students can own their experience instead of just collecting evidence on a form
- It will encourage lifelong learning through reflection and interaction with lecturers with prompt responses to situations.
- It will give students real benefit, in real time ... we think it's the real deal!

