



The challenge of moving clinical assessment online for a whole of nursing curriculum

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A case study from PebblePad's 2016 'Future Ready' conference on preparing and equipping learners for their journey.

The Context

The nursing curriculum is composed of two equal parts, theory and practice. Over the past three decades learning technologies have changed the face of teaching and assessing theory, while the practice setting has remained largely traditional. When the Australian Nursing and Midwifery Accreditation Council (ANMAC) approved a new curriculum for nursing and midwifery pre-registration education at La Trobe University in 2013, an opportunity presented to utilise digital learning technologies on placements. The premise was to value add rather than simply go online for the sake of it. In that regard, the solution had to improve efficiency in managing and monitoring students. It also had to support personal learning spaces which foster reflective practice, the evidencing and validation of competencies, and the identification of employability skills obtained during the placement.

The Problem

Traditionally clinical assessment of nurses has been completed using a paper-based system. Paper-based systems have severe limitations for principles of competency training, with deliberate practice and mastery of learning both requiring comprehensive feedback, real-time monitoring and feed-forward control. The awkwardness of the paper-based process, and its susceptibility to loss and damage, provided added incentive. However, the main driver was the limited information at hand to provide effective interventions and the disconnection between the triad involved in this engagement: the student, the clinical facilitator, and the teaching institution. Moving to an online assessment system was a solution to resolve these problems. This would improve accountability, transparency and record keeping of student placement data.

The key challenges were diverse and multi-dimensional. The system had to accommodate 600-700 students in each of 3 year levels, covering 8 core clinical subjects, 5 campus locations

including regional Victoria, and needed to have the ability to accommodate multiple student pathways. Many of the student placements commenced at different times of the year. One of the biggest challenges was the cultural change that was required to convince academic staff and clinical educators that the new digital system was a better method than the paper-based system that had been used for many years.

The Approach

A standard approach to design and development was undertaken (Figure1), beginning with considerable consultation to inform the development of a prototype. The prototype was tested from each user perspective. Based on this evaluation, a working model was trialed in two first year undergraduate subjects. A key objective was to build sustainability into the design. It was identified that the implementation had to consider long term sustainability practices beyond the initial pilot.

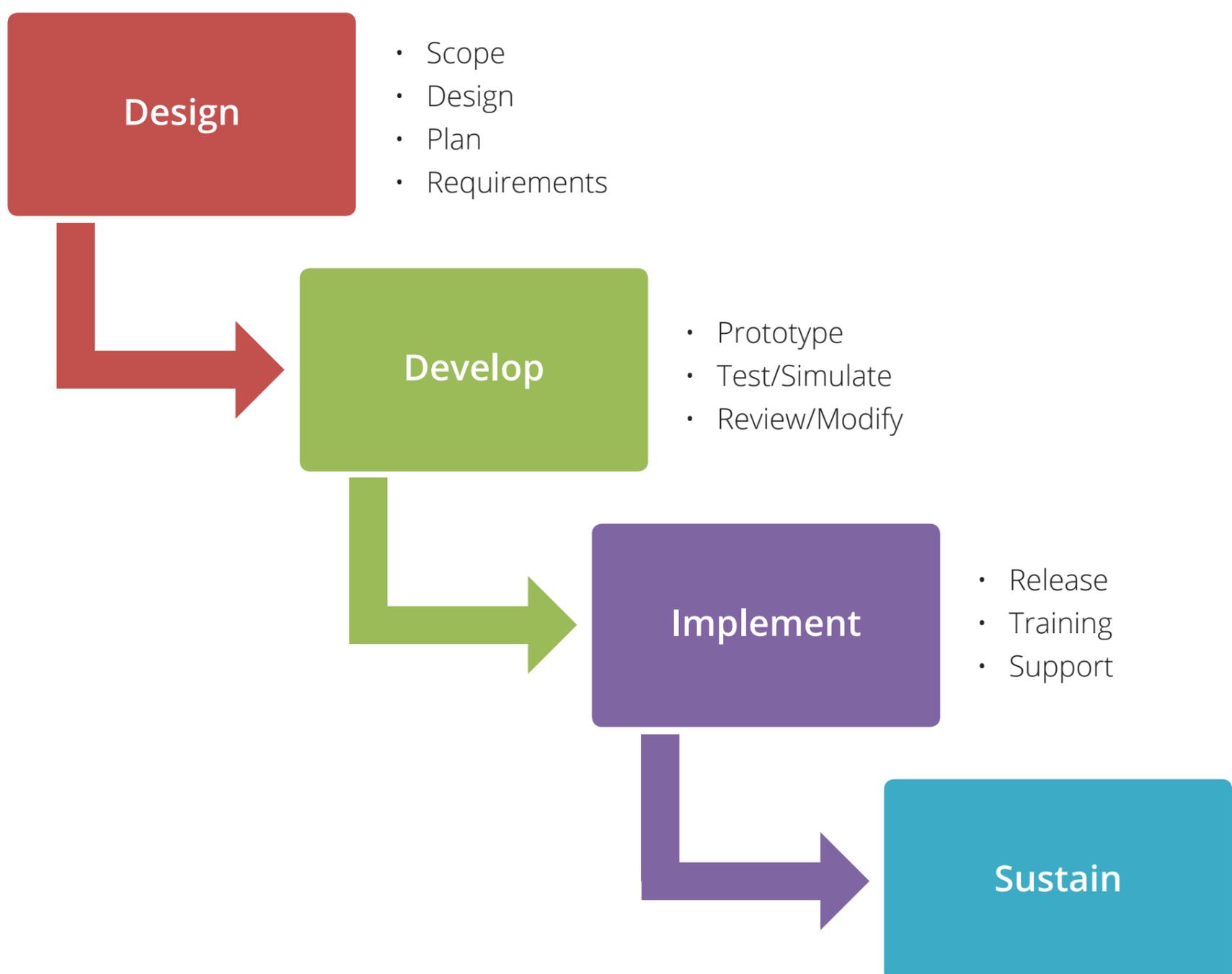


Figure 1: Implementation Model

Training was identified as a key requirement for all stakeholders. Face-to-face training, written documentation, and online resources including narrated video screen recordings were made available. At the end of this first trial the results and user feedback were reviewed and the model was re-developed to accommodate a range of changes. This established working model was now ready to be used in other subjects.

This working model included the introduction of a Three Phase Support model (Figure 2).

- Pilot phase where a high level of support is provided to all stakeholders to ensure a successful outcome and positive experiences.
- Update phase in which changes have been incorporated based on user feedback and the central institutional support team is introduced to the process. Staff are trained to use the software.
- Handover phase where central support teams cover most of the support calls and staff manage most of the basic tools with confidence.

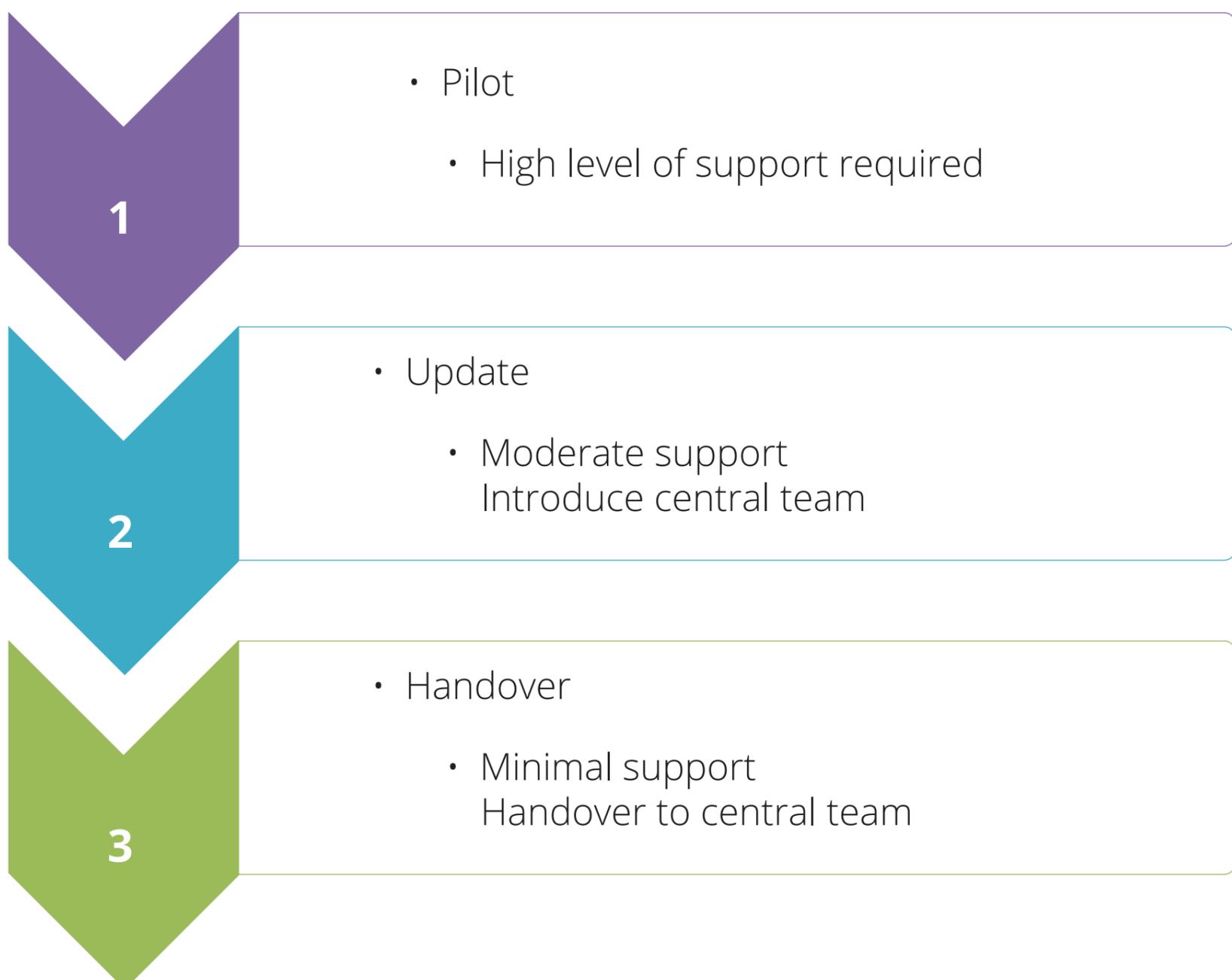


Figure 2: Three Phase Support Model

There were 9 workbooks to be used by each student over three years of clinical assessment. One workbook carried over 3 years and another 8 were required for each of eight individual subjects. The latter workbooks were programmed to be automatically released each semester. The 3-year workbook was programmed to progressively reveal eight sub-workbooks as required. To facilitate access to previous assessments it was decided to contain all workbooks in one ATLAS workspace. This “Super Workspace” would manage all clinical assessments for any one student. This evolved into one workspace for each campus (one metropolitan and four rural).

The Results

The System

Overall the implementation resulted in an effective online clinical assessment framework which accommodated the requirements of the NCAS professional nursing standards. The ATLAS reports provided real-time monitoring of student progress and academic coordinators appreciated the ability to effectively monitor and manage student activity in clinical placement.

The ATLAS system has an excellent Set function to manage pairing of clinical assessor and student at each site. However, with the large volume of students, the lack of current student clinical placement data, and inadequate staff allocated to administration, this became a major challenge for users.

Governance & Processes

As the implementation progressed, it became increasingly clear that communication to users about new system functions and issues was inadequate. The lack of a robust governance model hindered communications and caused some anxiety with users. New processes, problem solving and issue identification could have been better handled.

Clinical Educators

A number of users had a very poor experience and this was reflected in negative survey responses. This was attributed to a number of unexpected and unavoidable factors. Some students did not follow the instruction to submit their workbooks before clinical placement. This resulted in clinical educators not being able to assess students which became a source of student anxiety and assessor frustration. Some assessors did not attend training or understand how to use the assessment tool, which exacerbated their frustration. A number of users were unhappy about moving from a paper-based system to online digital assessment.

Students

The system was designed for a standard student experience beginning in the first year to progress through to third year. Other student cohorts with different prior experience joined the course at other non-standard entry points. This caused a number of issues as they were not originally identified and were unplanned for. Hence a number of these students had a poor experience.

Overall, the majority of students and staff had a very positive experience when they:

- attended training
- followed instruction
- understood the value of online assessment

Lessons Learned

The issues and challenges associated with this implementation were attributed to a number of identified factors. A project of this scale should have had a governance group, a project manager, and a dedicated user support team. The scale of the implementation introduces additional complexities and hence the requirements change. As an indicator, if the student user base is larger than 100 students, the need to address these requirements becomes evident. The following are some of the key factors:

- Effective communication between users is critical. A communication strategy is important to support consultation, inform users of decisions or changes, and manage problems.
- Support for users must be clearly defined and communicated. IT support, issue resolution and user guidelines must be robust.
- Training must be provided to new users. Effective and timely training must also be available for all users, with additional resources available for just in time reference.
- All student user scenarios need to be defined. Guidelines to inform how the various pathways are dealt with need to be documented and distributed for reference.

A significant unanticipated barrier to the project was a major restructure to the institution that resulted in a severe reduction in administrative support for the school. This contributed to a number of ATLAS administrative challenges and issues. Regardless, it is important to identify the administrative tasks that are required for successful outcomes with clinical assessment.

A number of initiatives were put in place to improve the system:

- A clinical educator guide was created and incorporated as a first landing page website for all workspaces. This is considered a key resource that all assessors will see upon entering a workspace.

- A PebblePad Guide for Clinical Assessment has been written to document workflows for subject coordinators, outlining all processes and identifying who does what and when. This guide includes details about the methods to address the various identified student pathways.
- A simple training video has been created for clinical educators who cannot attend training.
- The support teams for students and clinical educators have been identified and trained accordingly.
- Comprehensive online training material for students has been developed for reference and to address their key issues with using the software.
- Comprehensive online training material for teaching staff has been developed for reference and to teach the key concepts that they need to understand.
- A system to minimize administration of Sets and address the issue of access to individual student clinical tools has been developed.
- Work is being done to improve the printing capacity of the clinical tools for job applications.

Workshops have been run to discuss the rationale of clinical assessment portfolios. A key aspect was to identify issues and develop solutions for using PebblePad in real world practice in the clinical sites. The future will include a strategy to move the current compliance portfolio to a more personal reflective portfolio which articulates an individual's strengths and includes plans for professional and personal development.

In Brief – Showcasing 'Future Readiness' with PebblePad

- Using PebblePad we have successfully developed a framework that supports Nursing & Midwifery students in recording evidence of their competency towards becoming a Professional Graduate Nurse.
- The Employability Skills developed during clinical placement are assessed, validated, and recorded effectively in an online system which can be monitored and managed by the University.
- Students can review their performance, identify their strengths, and plan to address areas of weakness as they progress through their course and learning journey.
- With digital records, students can confidently present and share evidence of their abilities and professional skills to future employers.