

## NEW ZEALAND RESEARCH

## Evaluation of the learning components of a blended Bachelor of Midwifery programme: student perceptions of how these contributed to their learning and their readiness for practice.

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### ABSTRACT

**Background:** New information technologies for communication and distance learning enable programmes of study to be delivered, wholly or partly, off campus increasing the choice and flexibility for students. In 2007, Otago Polytechnic (OP) and Christchurch Polytechnic Institution of Technology (CPIT) Schools of Midwifery began a collaborative curriculum development for a jointly owned Bachelor of Midwifery, using a blended learning model for students based in seven regional sites throughout the South Island of New Zealand.

**Aim:** The aim of this survey was to evaluate the effectiveness of this new model of curriculum design and students' perceptions of their readiness for practice.

**Method:** A non-experimental descriptive survey of a purposive sample was developed to capture student demographics, their experiences of the blended learning components, and their perceptions of their readiness for practice. Graduates in 2011, 2012 and 2013 were invited to complete the survey. Ethical approval was obtained from the Otago Polytechnic Ethics Committee following consultation with the Kaitohutohu (Māori Advisor).

**Findings:** A response rate of 93% (14/15) students was achieved in 2011 for a paper survey and 47% (16/34) in 2012 and 50% (20/40) in 2013 with an online survey. Overall, the students agreed or strongly agreed that the weekly face-to-face tutorials, intensive block courses, online learning modules and online tutorials had all contributed positively to their learning, while some disagreed or strongly disagreed that aspects of their ākonga (tutorial) group process, the number of peer group presentations in intensives, and the level of oversight for their practice portfolio facilitated their learning. Almost all (12/13 in 2011, 14/14 in 2012; 11/12 in 2013) participants agreed or strongly agreed about the value of clinical placements and perceived themselves well prepared for midwifery practice.

**Conclusion:** This survey was successful in identifying components of the blended delivery programme that students perceived enhanced their learning, and aspects of these that could be improved. Almost all who participated agreed that the programme had prepared them for beginning practice as a midwife.

**Key words:** blended learning; undergraduate midwifery education; programme evaluation

### INTRODUCTION

Midwifery programmes in New Zealand have utilised new information technologies which increase the choice and flexibility for students by enabling programmes of study to be delivered, wholly or partly, off campus. In 2007, Otago Polytechnic (OP) and Christchurch Polytechnic Institute of Technology (CPIT) Schools of Midwifery programme began a collaborative curriculum development for a jointly owned Bachelor of Midwifery, with a blended learning curriculum, to students based in seven satellite locations throughout the South Island of New Zealand. The primary aim of this development was to provide access to midwifery education for students, many of whom are mature students keen to study/attracted to midwifery, while raising families, wherever they lived, enabling them to pursue their study and avoid the disruption of having to relocate families to the regional centres.

Students were enrolled into the programme in 2009. OP and CPIT developed a single set of shared online resources, using the same academic calendar and the same format to deliver the curriculum to their respective groups of students. At the time, students enrolled at OP were based in satellite sites in Southland, Central Otago and Dunedin/North Otago/South Otago. CPIT students were based in South Canterbury, Christchurch/North Canterbury and Nelson/Marlborough. In 2010, CPIT began a satellite group on the West Coast, and OP extended delivery to a further three satellite sites in the lower North Island: Wellington/Kapiti/Wairarapa region, Palmerston North and Whanganui.

The 480 credit (four year) programme is delivered over three years using 45 weeks of each year instead of the usual 28-34 week academic year. It uses a combination of e-learning, small and large group face-to-face teaching, group and individual study, virtual

classroom attendance and a wide variety of midwifery practice experiences. Over three years of the programme, midwifery students complete 2400 practice hours in primary, secondary and tertiary hospitals, in homes and other community settings. The hospital placements include experience in antenatal, labour and postnatal wards, acute assessment clinics and primary midwifery teams. In contrast, community experience is largely gained alongside Lead Maternity Carer (LMC) midwives, or caseloading midwives, and includes following women and their midwives throughout the maternity experience, whether the woman births at home or in hospital.

A blended learning model underpins the curriculum. Blended learning is defined as a combination of face-to-face and technologically mediated communications between the lecturers, students and learning resources (Bliuc, Goodyear, & Ellis, 2007) and is credited with providing both economic and social benefits for students and institutions (Derntl & Motschnig-Pitrik, 2005). OP and CPIT use a blended model which involves first and second year students meeting in groups of 4-8 each week; these meetings facilitated by midwife lecturers (kaiako) resident in the satellite sites. These ākongā (tutorial) groups provide opportunities for debriefing "follow through" on hospital and other clinical placement experiences, simulated midwifery skills practice, pastoral care plus discussion of theory content in the programme and its application to practice. To consolidate practice and theory learning, students build a midwifery portfolio over the three years, which includes skill sheets, records of clinical practice and reflections on their student midwifery practice.

Third year students are allocated a supervising lecturer who maintains regular contact with both the student and the midwife in each of their practice placements. This final year is largely devoted to midwifery practice alongside midwife LMCs (caseloading midwives) in a range of practice contexts and locations throughout New Zealand, with some students completing one elective placement overseas.

In addition to the weekly ākongā group meetings, OP students in years one and two come together four times a year, and third year students twice a year, at either the Dunedin (South Island) or Kapiti (North Island) campus for intensive blocks of clinical and theory content more suited to working in a larger group. These intensive blocks also provide opportunities for students to share practice experiences, and to socialise with the wider student group.

The face-to-face experiences are supported by learning course packages presented on the "Moodle" e-learning platform in modular form. Modules consist of a mix of text, illustrations, learning activities and hyperlinks to relevant literature, web sites or video clips. Courses are timetabled to run concurrently with one new module opened each week during the teaching year, supported with weekly, synchronous, online, virtual classroom tutorial sessions accessible by students from wherever they choose to log on.

## Literature review

Questions have been asked about the adequacy of e-learning for preparing students for clinical practice (Muirhead, 2007) and the potential for social isolation (Motiwalla & Tello, 2000)—particularly amongst Māori (New Zealand indigenous people) learners (Porima, 2011). Research, however, supports the use of new media in education and Blum (1999) identified that e-learning appears to suit mature women with family responsibilities—a demographic profile similar to that of our students. However, Porima and Blum do not address "blended" delivery which in our curriculum model includes a mix of face-to-face learning

and practice placements in addition to the online learning components, thus mitigating the potential for student isolation. Further, this combination of face-to-face teaching and online self-directed resources has been shown to support the development of communities of learning (Wenger, McDermott, & Snyder, 2002).

Blended learning programmes have been used by other health education institutions and disciplines. Examples include postgraduate programmes for registered nurses in rural Australia (Harris, Connolly, & Feeney, 2009); online discussion and face-to-face workshops for Scottish midwives for perinatal mental health education (Forrest, 2005); interactive scenario-based online modules for medical students (Lewin, Singh, Bateman, & Glover, 2009); and the use of video clips for distance physiotherapy students to test their neurological assessment skills (Davies et al., 2011). Caution is urged with blended learning (Bozarth, Chapman, & LaMonica, 2004), as online course material is potentially introduced without attention to the different kind of thinking required for students using this mode of learning (Muirhead, 2007). While such formats have the potential to provide higher education to ever larger groups of students, the structure and content need to stimulate the development of the critical thinking required for effective decision making in practice settings.

A search of relevant peer reviewed literature in the EBSCO, CINAHL, ERIC, PubMed, and ProQuest databases showed a recent increase in interest in blended learning. Several studies included midwives in the abstract and text where nurses and midwives shared a curriculum (Beadle & Santy, 2008). In most studies there was limited evidence for guidance about blended learning, given the diverse range of courses and programmes reported (Harris, Connolly & Feeney, 2009). Most often a single course, or part of a curriculum, was trialled using a blended delivery mode and these were frequently post basic, Honours, or other postgraduate programmes (Moore, 2012; Sidebotham, Jomeen, & Gamble, 2014; Smyth, Houghton, Cooney, & Casey, 2011; Stewart, Inglis, Jardine, Koorts, & Davies, 2013; Young & Randall, 2014; Zolfaghari, Sarmadi, Negarandeh, Zandi, & Ahmadi, 2009).

A survey of first and second year midwifery students at another New Zealand midwifery school (Milne, Skinner, & Baird, 2014) was undertaken following the introduction of a blended learning model. This model included face-to-face teaching, online modules, and videoconferencing of lectures (the last of which is not included in Otago's and CPIT's blended learning model). The students in this study reported experiencing problems with technology and lecturers were challenged by the demands of delivering traditional lectures by videoconference.

Missing in much of the literature was research on the comprehensive design, development and delivery of blended curricula in undergraduate midwifery education. Thus, the aim of this research was to evaluate the effectiveness of a new model of curriculum design of a Bachelor of Midwifery programme at Otago Polytechnic with a view to describing the learning experiences and perceived readiness for practice of students in the programme.

## METHOD

A survey was developed with the aim of capturing the experiences of three cohorts (2011, 2012 and 2013) of graduating students' experiences of the blend of learning components in the programme, and their perceptions of their readiness for practice at this point in their study. Ethical approval was obtained from the Otago Polytechnic Ethics Committee (OP Ethics #502) following consultation with the Kaitohutohu (Māori Advisor). For each

question respondents were asked to either tick a box, or circle a Likert scale response (strongly agree; agree; disagree; strongly disagree) to each statement. A text box at the end of each set of questions was available for students to add comments.

We were mindful that any research undertaken with students in a programme, by the managers and educators of that programme, had the potential to influence student responses. For instance, students might feel obliged to participate and provide agreeable responses to the questions. However, the third year students, at the time they completed the surveys, had all passed their coursework so would be less likely to be influenced by these constraints.

To reduce any perception of coercion, no identifying details were required on the questionnaire. Confidentiality was also maintained by using a non-teaching research assistant to administer and enter agreed codes to the paper survey in 2011, after which the anonymised data were entered into an Excel spread sheet. The electronic surveys in 2012 and 2013 were administered and collated by the organisational researcher responsible for OP-wide student and staff surveys with de-identified data returned to the researchers.

Completion of the paper questionnaire or online survey constituted consent. However, students could request to have their survey form or responses removed up until the time that analysis began and could request removal of any written comments prior to publication of the survey results.

**FINDINGS**

A response rate of 93% (14/15) students was achieved in 2011. The rates were lower with the online survey at 47% (16/34) in 2012 and 50% (20/40) in 2013. An initial loading problem with the 2013 survey resulted in seven students being unable to complete the survey, potentially accounting for the higher number of missing data in response to the statements about the learning components.

Descriptive statistics were calculated for each question and numbers, rather than percentages, were used because of the small number of participants. Responses to the statements about the learning components and readiness for practice are presented in Tables 1-8 with the strongly agree/agree, and the strongly disagree/disagree categories combined for reporting results. Student comments are included where these help to explain the results.

**Demographics**

All the respondents were female. One student in 2011 and another in 2012 identified as New Zealand Māori, the remainder identified as New Zealand/European/Pākehā (non-Māori). The age range, when starting the programme, was younger for the

2011 cohort and more evenly distributed in the other two cohorts. Twelve students reported being under 26 years of age, and 27 reported being between 26 to 50 years of age, when they started the programme. Eleven did not answer the question. Most had responsibility for dependent children during their programme, (8/14) in 2011, (14/16) in 2012 and (17/20) in 2013. In addition 36/50 students, who responded to the question, undertook part-time employment or voluntary work during their programme.

Across the three cohorts, 10 students lived in a rural area and 37 in an urban area and 32/46 who responded to this question indicated that they would not have been able to access the programme prior to the development of the blended/satellite curriculum model.

Twelve of 47 students had been enrolled previously in courses using a blended learning model; some of whom had completed the Certificate in Health—a bridging programme into the health degrees offered at Otago Polytechnic. With regard to their computer skills at the beginning of the programme, 45/49 who answered the question considered themselves to be adequately prepared for online learning.

**Student experiences of the learning components in the new curriculum**

Table 1 indicates that all students who responded (42/50) agreed/strongly agreed that the ākongā group was important to their learning. Comments included “best part of the programme”, “fabulous leaders” and “great way to engage and discuss ideas”, “providing reflection, and learning opportunities” and “the group made my week”. While the majority agreed/strongly agreed that the groups felt like a safe environment to discuss sensitive issues, some in each year: 2011 (n=6), 2012 (n=2) and 2013 (n= 4), disagreed/strongly disagreed with the statement. Comments included “strong personalities could dominate”, “...it did not feel like a safe place to discuss practice” and “some group dynamics were challenging”.

Most students in 2011, 2012 and 2013 (11, 8, 12), agreed/strongly agreed that time spent in intensive block courses was valuable, while a small number in each year (3, 7, 1) disagreed. The intensive block courses were seen “as opportunities to revise practice skills and catch up”. Some guest speakers were considered great while some students said they would have preferred spending the time on other areas of learning. Least popular with all three cohorts were the group presentations, with most students in each year (12, 9, 3) disagreeing or strongly disagreeing that group presentations enhanced their learning. Comments included that there were “too many group presentations”, these were “hard to organise when [the students were] spread out” and one expressed reluctance about “having to carry some group members”.

The majority in each year (8, 12, 11) agreed/strongly agreed

Ākongā student groups	Agreed/strongly agreed			Disagreed/strongly disagreed			Missing data		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
My group was an important part of my learning experience	13	16	13	0	0	0	1	0	7
My group felt like a safe environment to discuss sensitive issues	8	13	8	6	2	4	0	1	8
Discussion and reflection within the group enhanced my learning	12	14	12	2	2	1	0	0	7
Learning and practising clinical skills in my group was beneficial to my learning	9	16	13	4	0	0	0	0	7

that the online Moodle resources enhanced their learning, while almost half (n=6) of the respondents in 2011 disagreed/strongly disagreed. Comments in relation to the Moodle content included “some of it was text heavy”, “[it was] hard to navigate” and “some links didn’t work”; though one student wrote that she “appreciated the opportunity to [refer] back to modules” during the year.

The 2011 cohort were similarly divided about their ability to access IT support easily with 6 disagreeing that they could access IT support if needed. However, in the subsequent cohorts 9

was used to track their progress in the programme. Further, most students (10, 7, 6) did not agree that the portfolio enabled them to integrate their theoretical and practice experiences. Comments included that there was “contradictory information about what was needed” “seemed to be an ‘add on’ and not integral to the programme”. However, in each year most students (12, 11, 9) agreed or strongly agreed that they felt proud of their portfolio. One commented “I took my portfolio to my job interview and felt proud as the interviewers skimmed it and read some of the material”.

**Table 2. Student responses to the statements about their intensive block courses**

Intensive block courses	Agreed/strongly agreed			Disagreed/strongly disagreed			Missing data		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Time spent in intensives was valuable for my learning	11	8	12	3	7	1	0	1	7
The number of intensive blocks during the programme met my needs	9	9	11	5	5	2	0	2	7
The guest speakers at intensive blocks were valuable for my learning	9	11	10	5	3	1	0	2	9
Preparing and presenting in peer group presentations enhanced my learning	2	5	8	12	9	3	0	2	7

respondents in 2012 and 12 in 2013 agreed/strongly agreed that they could easily access IT support. No comments were made about the IT services in any of the comment boxes.

Table 4 shows that the majority of the students (11, 13, 12) in each year agreed or strongly agreed that they regularly attended the online tutorials; they (12, 14, 10) indicated that they listened

The midwifery facility practice placements were appreciated with almost all students in each year (13, 14, 11) agreeing or strongly agreeing that they were able to consolidate their practice skills and a similar number (9, 13, 10) agreed/strongly agreed that their midwifery practice opportunities complemented their theoretical learning, and that they felt welcome in the facilities.

**Table 3. Student responses to the statements about the Moodle online modules**

Moodle online learning modules	Agreed/strongly agreed			Disagreed/strongly disagreed			Missing data		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
The design of the Moodle online learning resources enhanced my learning	8	12	11	6	2	2	0	2	7
I regularly accessed and contributed to the online forum for each course	10	8	6	4	5	7	0	3	7
I was able to complete each online module in the expected time frame	10	10	9	4	5	7	0	3	7
The flexibility of being able to study in my own home/time was beneficial to me	9	13	12	4	1	0	1	2	8
I could easily access IT support if I needed it	7	9	12	6	3	1	1	4	7

to the recordings when unable to attend; and (9, 10, 12) found them useful for their learning. However, student comments reveal some aspects which challenged them. For example, one student commented that “I don’t like to speak online and wasn’t able to overcome this” and another that it was “frustrating when other students claimed they had no microphone...” and there were times “when the technology wasn’t working”.

Table 5 indicates that students did not all agree that they understood the portfolio requirements and only a small number (1, 6, 5) in each year agreed or strongly agreed that the portfolio

While over half of the students in 2013 (8/12) agreed/strongly agreed that the facility midwifery staff appeared to understand their practice requirements; agreement was lower in 2011 and 2012 (6/14, 5/13). Comments relating to this response included “some DHB staff midwives were unclear what they should be teaching” “[the midwife]...didn’t know the [practice placement’s] expectations”. These comments were balanced by comments such as “a fantastic range of placements” and “great practical experiences” and “being proactive” identified by one student as the key to getting the best experience.

Table 4. Student responses to the statements about the online tutorials									
Online tutorials	Agreed/strongly agreed			Disagreed/strongly disagreed			Missing data		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
I regularly attended the online tutorial	11	13	12	3	1	1	0	2	7
I found the learning environment of the online tutorials comfortable and supportive	8	9	11	5	0	2	0	2	8
The online tutorials supported the learning in the modules	9	14	10	5	0	2	0	2	8
I usually listened to the recordings of the tutorials that I was unable to attend	12	14	10	2	0	3	0	2	7
The tutorials were a useful component of my learning experience	9	10	12	5	1	1	0	5	7

Table 7 indicates that the majority of students (13, 14, 11) in each year agreed/strongly agreed that the community and LMC placements provided opportunities to consolidate their practice skills.

There was also agreement by most (12, 13, 11) regarding how their experiences complemented their theory learning and all,

*teaching*". However, while the majority agreed/strongly agreed that the midwifery staff/midwives appeared to understand their practice requirements, in each year some students did not agree with this (n=4, 2011) (n=6, 2012) and (n=2, 2013). One commented that she had difficulties contacting her supervising lecturer, "[I] felt like I was flying solo".

Table 5. Student responses to the statements about the midwifery student portfolio									
Portfolio	Agreed/strongly agreed			Disagreed/strongly disagreed			Missing data		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
The requirements for completing the portfolio were clear to me	11	5	9	2	8	4	1	3	7
My portfolio was used regularly by my lecturer/kaiako to assist me to track my progress in the programme	1	6	5	13	7	8	0	3	7
The midwifery portfolio enabled me to integrate my theoretical learning with my practice experiences	4	6	6	10	7	6	0	3	8
I feel pride in myself and my learning progress when I reflect on my portfolio	12	11	9	2	2	4	0	3	7

except two students in 2011, agreed that they felt welcomed and supported in their community placements.

Comments included "awesome" "great experiences" and "huge kudos to the LMCs for all their efforts and all the coffees they buy", "... could not have gotten through this degree without their support and

All the students who responded to the statement agreed or strongly agreed that they gained a strong theoretical basis for their practice. Just four students across the three cohorts did not agree that they had experienced care in all settings and one in 2013 felt unable to develop professional relationships across disciplines. Finally, all

Table 6. Student responses to the statements about their midwifery facility practice placements									
Midwifery facility practice placements	Agreed/strongly agreed			Disagreed/strongly disagreed			Missing data		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
I had opportunities to consolidate my midwifery practice skills while on these placements	13	14	11	1	0	0	0	2	9
My midwifery practice experiences complemented my theoretical learning	12	14	10	1	0	1	1	2	9
I felt welcomed and supported by facility midwives and staff in my facility placements	9	13	10	5	1	1	0	2	9
The facility midwifery staff appeared to understand the practice requirements of my course	6	5	8	8	8	4	0	3	8

**Table 7. Student responses to the statements about their community and LMC (case loading) midwifery placements**

Community midwife based placements	Agreed/strongly agreed			Disagreed/strongly disagreed			Missing data		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
I had opportunities to consolidate my midwifery practice skills while on placements	13	14	11	1	0	1	0	2	8
My midwifery practice experiences complemented my theoretical learning	12	13	11	2	1	1	0	2	8
I felt welcomed and supported by community midwives and staff in my community based placements	12	14	12	2	0	0	0	2	8
The midwifery staff/midwives appeared to understand the practice requirements of my course	10	8	10	4	6	2	0	2	8

but one student in 2011, and one in 2012, felt well prepared for practice as a registered midwife.

One student commented that she had “*learnt a lot about herself in the process*” and another that she felt “*reasonably ready for autonomous practice*” with a final comment from another “*overall a fantastic, busy, challenging, inspiring three years thanks*”.

## DISCUSSION

The graduand student survey responses and comments from the 2011, 2012 and 2013 cohorts in the Bachelor of Midwifery programme provided some insights into their experiences of the face-to-face, online and practice components of the programme

## The face-to-face learning components

With the geographical spread of our students, the weekly ākonga group meetings in the satellite areas provided opportunities to meet face-to-face, to learn skills and to share practice experiences. Most students in all three cohorts agreed about the social and learning value of their ākonga group. Such groups have the potential to model a template for future midwifery team and group practice (Geraghty & Bayes, 2009) enabling critical problem solving skills and practice competence. However, not all the students felt safe to engage in discussion in their groups, citing personality differences and breaches of confidentiality regarding what was shared. This has prompted us to establish ground rules for clear and respectful communication early in each year, and for kaiako to make time

**Table 8. Student responses to the statements about their readiness for practice**

Readiness for practice	Agreed/strongly agreed			Disagreed/strongly disagreed			Missing data		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
Overall, I gained a strong theoretical basis for my midwifery practice	13	14	12	0	0	0	1	2	8
Overall, I gained experience across the midwifery scope of practice	13	14	11	0	0	1	1	2	8
Overall, I experienced maternity care in all settings	12	13	10	1	1	2	1	2	8
I was able to develop professional relationships with practitioners from other disciplines and understand their roles in the maternity service	13	14	11	0	0	1	1	2	8
I feel well prepared for practice as a registered midwife	12	14	11	1	0	1	1	2	8

and captured their perceptions of their readiness for midwifery practice. The majority of respondents in this study were between 25 and 35 years of age, and consistent with women in this age range, most had childcare responsibilities and paid or voluntary work commitments; thus the blend of programme components enabled them to live in their home areas and fit family and work responsibilities around their study. While this flexibility is welcomed, the distinction between study and personal lives can become blurred (Johnson et al., 2010). Thus opportunities for face-to-face contact reduce isolation and enable students to collaborate and share their learning experiences with their peers.

for one-to-one interaction with each student so that individual learning needs can be addressed.

The student midwifery portfolio is also designed to support student learning. While the students who responded to the surveys were proud of their portfolios, almost half did not agree that their portfolios were used to track their progress over the year. In response to this feedback kaiako are meeting more frequently with students and reviewing their portfolios regularly. This has resulted in more consistency in both their use and content. For the future the aim is to move to an electronic version to enable more portability and easier navigation and to enable students to continue to build their portfolio into the future.

Face-to-face contact also occurs four times a year in the intensive block courses held on the two campuses. While most agreed the intensives were valuable for their learning, the students did not agree about the number or value of the peer group presentations required during these times. Moving from the classroom to a blend of learning modes entails a cultural change for all parties, and offers the opportunity to experiment with creative, interactive and collaborative learning in course work and assessment (Gray & Tobin, 2010). Alternatives to peer group presentations might include teacher assisted small group projects, which Johnson et al. (2010) suggest work well for "serialistic" (bottom up) and "holistic" (top down) learners with the learning fulfilling either formative or summative assessment tasks (Pask, 1976).

Nonetheless, group presentations, if well aligned with long term learning and aspects of problem solving, have value and ideally would involve students in setting the criteria and rating scales for at least some of these assessments (Falchikov & Magin, 1997). By introducing a narrative, students could begin with a practice issue and build the presentation with their own investigation, supported by the lecturer (Gilkison, 2013). Learning environments where there is authentic collaboration on such a project have the potential to foster active and engaged learners and scaffold lifelong learning (Boud & Falchikov, 2006).

Potentially, the presentation could incorporate a broader range of tasks including material from several courses or joint projects with students from other disciplines. The latter could help set the scene for future collaborative practice and problem solving, designing broader assessments to evaluate complex tasks involving cooperative approaches and shared learning (Rolheiser & Ross, 2011). Such changes to assessment practices require clear and unambiguous feedback on student work (Rust, 2002), with alignment between the desired outcomes, assessment tasks, and course content (Wyllie, 2011), and may present opportunities for peer marking (Rovai & Barnum, 2003). These assessment skills developed at undergraduate level can help build capability for the future when they assess midwifery students themselves.

### The online learning components

The online Moodle modules are accessible over the year. More participants agreed than disagreed about the value of these resources, although there were comments about the amount of text included and problems with navigating the links in some. DiCarlo (2009) suggests that online materials often provide too much content, some of which may be obsolete or erroneous, promoting rote learning which is quickly lost following examination. Video clips can be helpful but important practice principles may be missed, should students focus on particular aspects of the content (Bloomfield & Jones, 2013). Thus, moving to online modules from traditional teaching methods means taking a fresh look at how the material is presented, but even the best presented modules require the guidance of the teacher.

The emphasis of online learning, according to Laurillard (2002) should be about learning how to think rather than what to think, thus avoiding just knowledge transmission. Further, a "conversational framework" (p.143) with collaborative investigative activities can change the nature of the teaching and focus on a sound understanding of the underlying practice principles (Beadle & Santy, 2008). Engagement might be fostered with the use of a WIKI, a movie and devices such as "photovoice" (Kitson-Reynolds, 2009) or a "virtual town" (Pask, 1976), which include "real world" scenarios (Knowles, 2004).

Similarly, strategies that work in online modules could also be used in the synchronous online tutorials. In the current surveys students

differed as to how they engaged online. For example, one student was reluctant to speak, whereas another was frustrated when other students claimed not to have a microphone. According to Blum (1999), gender differences, adult learning styles and communication patterns affect how students learn and engage online. For example, female students place greater emphasis on relationships in online courses and prefer collaborative learning modes (Blum, 1999). Thus, online strategies that enable collaboration and discussion not only suit women's communication patterns, but also meet some of the lifestyle realities of women in this age range.

It takes practice to manage the challenge of the "unseen class" for lecturers new to facilitating online tutorials. To assist, Myers et al., & Lee (2011) advocate innovative teaching strategies and transparent processes, with the lecturer adopting a "guide on the side", rather than "sage on the stage", teaching style (p.4). Reversing roles, using virtual breakout rooms, quick anonymous quizzes, or class interaction on a shared whiteboard (Milne, Skinner & Baird, 2014) could provide new insights and learning for both groups (Harris, Connolly & Feeney, 2009). Whatever strategies are used, the communication with the lecturer remains critical (Motiwalla & Tello, 2000). A warm, helpful and facilitative approach is needed, with clear explanations of the learning content and objectives for the session (Blum, 1999; Phipps & Merisotis, 2000; Rovai & Barnum, 2003), which models student enthusiasm for learning (Beadle & Santy, 2008).

Vital, however, for any online teaching, is readily accessible technical assistance for both students and lecturers (TEACHONLINE, 2015). In the current study the students assessed themselves as having adequate computer skills but, for those with poor internet connections, frustration was experienced during online tutorials. These findings around the technological challenges, and the cultural change required in lectures, resonate with those found by Milne, Skinner and Baird (2014). In response to these challenges, IT support has been strengthened at OP with a quick response to students struggling to join their online class. Advice for current and prospective students on how to adapt their IT service to enable full participation is now part of our introductory student package.

### Preparing midwifery students for practice

Whatever course components or simulation are provided, it is in the practice setting that this learning comes together and builds the foundation for future midwifery practice. In the current study the practice experiences with midwives and other health professionals, in both the facility and community settings, were highly valued by the students. Of concern, however, was the perception that the objectives and expectations of the placements were not always well understood by the midwives in the practice settings.

This challenge for midwives in assessing students was described by James (2013). The midwives were "anxious to get [the assessment] right" (p.16), particularly when there were aspects of the student's performance that did not meet the standard for safe and appropriate care. James reported that frustration increased when the school provided "text heavy" information (p.16) and they found the time taken to fulfil the preceptor role took longer than anticipated. Similarly, where midwife preceptors are under pressure to complete their work, it is thought that the students slow them down (Raisler, O'Grady, & Lori, 2003). Adding to this is the pressure for students to facilitate births which can come at the cost of consolidation in other areas of their practice (Licqurish & Seibold, 2013).

Communication about expectations for students in their practice placements needs to be clear, collaborative and respectful, acknowledging the place of each actor or agent in the successful

achievement of student practice competence. At times this will require discussions with the midwives in practice to facilitate understanding of their assessment responsibilities and to manage any student performance issues (Geraghty & Bayes, 2009). Such collaborations will help bridge any perceived divide between school and practice and help students learn to manage complex workplace relationships.

Whatever challenges the students in the three cohorts faced during their programme, they were almost unanimous in agreeing to the statements about their practice readiness. This included their practice and theoretical bases, their range of midwifery scope experiences and their opportunity to develop professional relationships across disciplines. These perceptions appear to support the blend of learning components in the programme and this confidence is supported by improving student success and retention statistics in the OP quality performance indicators.

## LIMITATIONS

This was a small study designed to capture student experiences of the learning components in the programme and their perception of their readiness for practice which highlighted some trends over the three years, although the number of missing data from the 2013 survey is regrettable. Further, as the study progressed over the three years, changes were already being made in line with the early findings from the survey, our own reflections on the programme, and in response to other school and organisational evaluation processes. A repeat of a similar survey with successive groups of graduands may indicate if these changes continue to be effective. Alternatively, focus groups, held by skilled facilitators, may provide a richer understanding of the key findings from the surveys. Further studies could include re-surveying practitioners after one year in practice, interviews with midwives in practice settings who have supervised our students during the programme, and a study to describe lecturer experiences and insights from teaching in the blended programme.

## CONCLUSION

This three-year graduand study was completed by 50 (56%) of a possible 89 final year students in the Otago Polytechnic bachelor of midwifery programme. The survey data were successful in identifying some trends across the three years and the survey respondents agreed that the blend of learning components contributed to their learning, while highlighting areas for improvement and innovation. The results from these surveys and those from our institutional quality evaluations suggest that the model is adaptable, transparent and sustainable and, importantly, that the graduands feel well prepared for beginning midwifery practice.

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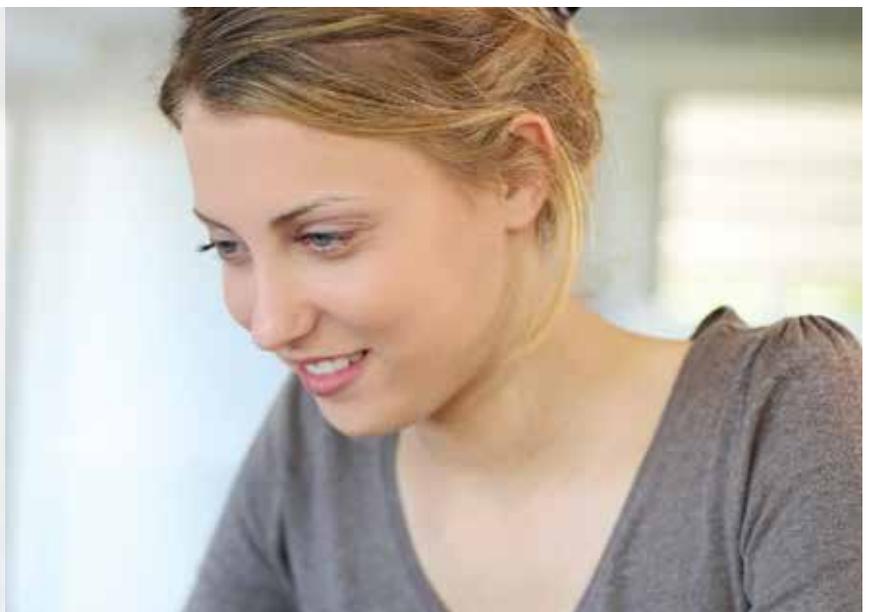
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## Midwifery post-graduate education grants

Health Workforce New Zealand provide grants to subsidise the full cost of fees and some travel and accommodation costs.

Applications are administered by the New Zealand College of Midwives Finance Administrator email: [finance1@nzcom.org.nz](mailto:finance1@nzcom.org.nz)



### Key Dates - Semester one first application round 2016:

<b>18 January</b>	First Application Round for Semester One grants closes
<b>29 January</b>	NZCOM provides data for all approved applications to Health Workforce New Zealand
<b>29 January</b>	Midwives notified if application meets criteria for funding and intended payment arrangements
<b>22 February</b>	HWNZ payment disbursed to NZCOM
<b>23 February</b>	NZCOM disburses grant payment either directly to education providers or midwives

There will be a further opportunity to apply for Semester One grants in March 2016. Applications prioritised on a first come first served basis. To apply visit [www.midwife.org.nz/education/study-grant-opportunities](http://www.midwife.org.nz/education/study-grant-opportunities)