Supervision of Nursing Students in Rural Environments: Engaging Learning by Teaching the Teachers

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Abstract

The increased number of undergraduate students requiring supervised experiences in environments where service delivery is the primary goal challenges the health profession workforce. Given the need to recruit and retain suitably qualified and educationally prepared staff into these sometimes under-resourced locations, guidance of health profession students, in particular students of nursing, in rural areas of Tasmania is a topical issue. This situation was acknowledged in 2010 when the Commonwealth Government's Department of Health and Ageing sponsored a local project to increase the number of opportunities for students to undertake professional experience within non-traditional and rural healthcare settings. The project goals included identifying and acknowledging those healthcare professionals who supervised learners; providing guidance, mentorship and resources; and building capability and capacity in environments to host students. On project completion, further Commonwealth funding became available through Health Workforce Australia to continue the project aims.

Over six years, an educational process focussing on the needs of rural healthcare professionals related to supervision and support of undergraduate nursing students was established. An evaluative approach enabled the use of Weimer's 'personal accounts of change' methodology to analyse and critique the application of developed learning and teaching resources. Initially, resource development focussed on current knowledge, skills and understandings of supervision of learners by health professionals in practice. From the findings, the scope of support broadened to include development and delivery of workshops to enable the supervisors of students to develop a pedagogical understanding of learning and teaching in healthcare settings. Evaluation suggested supervisors require guidance and mentorship related to the 'how' of learning and teaching. More specifically, they wanted synchronous and asynchronous access to consistent and contemporary learning and teaching information in a timely manner. Given their geographic isolation, this educational support was delivered in a variety of innovative ways including digital resources, online programs, video-conferencing and face-to-face learning opportunities. This paper outlines the processes and outcomes of developing a collaborative approach to increasing the capability and capacity of health professionals, in particular, registered nurses, who choose to supervise undergraduate students during their rural workplace-based professional experience.

Introduction

There is a predicted global shortage of registered nurses (Health Workforce Australia, 2013), with a recent study predicting a shortfall of 109,000 nurses in Australia by 2025 (Health Workforce Australia, 2014). Fifty-eight percent of the registered health profession workforce within Australia comprise nurses and midwives, and according to the Australian Institute of Health and Welfare, 40 percent of this cohort are aged over 50 years (Australian Institute of Health and Welfare, 2013), which will significantly impact the rural nursing workforce (Bragg & Bonner, 2015). Whilst these statistics create workforce planning challenges, the opportunities for providers of health-related courses to expand student placement capacity and to consider non-traditional placement locations is key to the development of a sustainable health workforce (Health Workforce Australia, 2013, 2014; Sutton et al., 2016). As such, the placement of nursing students into rural areas for professional experience has been a central focus of many universities. Whilst acknowledging the benefits to future workforce planning, this influx of learners into targeted locations has placed additional demands on the health sector and in particular those who undertake the role of teacher or preceptor.

In 2010, to gauge rural Tasmanian health organisations' capacity to host additional nursing students to undertake professional experience, a needs assessment of registered nurses who precept students was implemented. Findings suggested geographically isolated preceptors needed additional educational support to assist them in their role when supervising undergraduate student nurses. In response, a suite of learning and teaching resources were developed, which included synchronous and asynchronous digital resources, online programs, video-conferencing and face-to-face learning opportunities. Through a 'lens of experience' (Weimer, 2006), this paper chronologically provides an account of the processes engaged to further develop the learning and teaching capability of rural registered nurse preceptors in Tasmania.

Due to the models of supervision employed in healthcare settings, the terminology to describe health professionals who supervise students is complex. For the purpose of this paper, and to avoid confusion, registered nurses who mentor, coach and teach students of nursing are known as 'preceptors' – a role defined as a registered nurse who provides one-to-one supervision and support of a nursing student in practice (Hilli, Salmu, & Jonsén, 2014; Kalischuk, Vandenberg, & Awosoga, 2013; Newton, Henderson, Jolly, & Greaves, 2015). 'Non-traditional' placement settings refer to facilities external to urban hospital settings including rural healthcare environments. Additionally, 'professional experience' in this context is a term used to describe a mandatory course work-based learning activity that occurs within a real-world healthcare setting. 'Supervision' refers to the direct and indirect guidance of a student by a registered health professional and includes professional and clinically focussed activities undertaken by learners whilst developing capability as a nurse (Nursing and Midwifery Board of Australia, 2016a).

Background

As an accredited degree program, the Bachelor of Nursing in Tasmania affords students of nursing preservice professional experience across health sectors and locations. In accordance with national nursing accreditation guidelines, each student must undertake a minimum of 800 hours of workplace learning to ensure they fulfil course requirements (Australian Nursing and Midwifery Accreditation Council, 2012). When in practice, students are supervised by appropriately qualified registered nurses who meet the Registered Nurse Standards for Practice (Nursing and Midwifery Board of Australia, 2016b). Related to learning and teaching, these

Standards include that nurses maintain the capability for practice (Standard 3) and expectations that nurses use a lifelong learning approach for continuing professional development of self and others (Standard 3.3). As such, there is a joint responsibility between education and healthcare providers to ensure students engage in mandatory professional experience activities, alongside capable registered nurses, to enable them to fulfil the requirements of their course. However, for some students, real-world learning does not equate to a positive experience (Nash et al., 2011), and evidence suggests students' learning is impacted by the behaviour of those who supervise them.

Healthcare environments are predictably unpredictable (Brown et al., 2011), and students are often afforded experiences that are unplanned, complex and sometimes confronting. Therefore, in the process of preparing a future fit-for-purpose registered nurse workforce to provide high quality care, it is essential that students receive improved workplace experiences in a *good learning environment* (Newton et al., 2015, p.92). According to authors, this environment is one where students receive effective supervision (Nash et al., 2011) from approachable supervisors (Killam & Carter, 2010), develop a collaborative relationship with team members and are exposed to relevant learning opportunities whereby they actively contribute to care activities (Ford et al., 2016; Papathanasiou, Tsaras, & Sarafis, 2014). These factors are seen to contribute to a sense of belonging that fosters positive interactions between staff and students (Levett-Jones, Lathlean, Higgins, & McMillan, 2009). Furthermore, creating a learning and teaching environment that is perceived as supported and positive is linked to workplace choice upon graduation (Sanderson & Lea, 2012; Sutton et al., 2016), a factor that must be taken seriously when considering rural health workforce projections.

Subsequently, ensuring students are well-supported in rural environments is crucial for active engagement in learning. Rural healthcare settings are often smaller facilities with a more heterogeneous patient mix, having fewer human and health resources and, at times, a sense of isolation prevails that can be confronting for some students (Killam & Carter, 2010). Unlike many of their urban counterparts, the presence of a dedicated clinical educator may not be afforded to students in rural areas, therefore they may receive support and guidance from a group of nurses, rather than just one (Killam & Carter, 2010; Mather & Marlow, 2012). Thus, the importance of educationally prepared and capable preceptors to provide contextual information to enhance student learning cannot be underestimated (Taylor, Brammer, Cameron, & Perrin, 2015).

Standards of care are dependent on those who deliver it. Consequently, the development of a capable healthcare workforce is reliant on quality learning and teaching activity (Taylor et al., 2015). Similar to initial teacher registration—undergraduate nursing students are required to receive a depth and breadth of placement experiences across sectors and geographic locations (Capeness, 2015). Also, similarly to preservice teachers, student nurses are supervised in practice and are required to demonstrate increasing capability according to practice standards, throughout their course. What differs however, is student nurses are supervised and taught predominantly by nurses, whose knowledge and expertise primarily relates to care provision, not teaching.

Willingness to teach is a quality expected of nurse preceptors; registered nurses however, have many responsibilities related to care giving. Understanding the pedagogical processes and outcomes related to the 'how' of teaching is not their prime focus. Preceptors require educational support to ensure they develop a contemporary repertoire of learning and teaching capability required to prepare the next generation of highly skilled nurses (McSharry & Lathlean, 2017). That being said, it is well documented that competing tensions and workload pressures have negatively impacted the ability of rural preceptors to supervise students (Sanderson & Lea,

2012). Acknowledging the constraints and developing resources to reduce the tension between teaching and care delivery (Health Workforce Australia, 2010) is key to ensuring quality teaching of students (Henderson & Eaton, 2013).

Supervising students is integral to the role of registered nurses; however, individual capability, willingness and preparedness to supervise can negatively impact the quality of teaching and the learning outcomes of students (Killam & Carter, 2010). The behaviour and attitudes of preceptors are consistently highlighted in the literature as impacting students' performance in practice (Ford et al., 2016; Jokelainen, Turunen, Tossavainen, Jamookeeah, & Coco, 2011; Siggins Miller Consulting, 2012). What preceptors require is support, because limited understanding of expectations of both students and their education provider is seen as a barrier to learning and teaching (Ford et al., 2016). Furthermore, developing an understanding of factors that support or hinder student learning can ensure greater clarity of purpose (Houghton, Casey, Shaw, & Murphy, 2013). A study by Kalischuk and colleagues (2013) reported preceptors desired greater accessibility to learning and teaching resources and more contextual information to assist them to fulfil their role (Courtney-Pratt, Ford, & Marlow, 2015).

According to Ludin and Fathullah (2016, p.84), encouraging preceptors to focus on *student centred learning rather than teaching centred learning* is crucial. Reorienting preceptors to consider how students learn in practice and to identify *pedagogically rich* activity (Billett, 2016, p.130) within the workplace will benefit both learners and teachers. Encouraging preceptors to acknowledge learning possibilities and opportunities (Jokelainen et al., 2011), along with identification of *teachable moments* (Sanderson & Lea, 2012, p.337), will overtly enable them to tailor activity to suit the learning needs of students (Brown et al., 2011). Limited exposure to students has impacted the learning and teaching mastery of some rural preceptors (Sutton et al., 2016), they therefore require guidance, mentorship and resources to support and supervise students (Barnett, Cross, Shahwan-Akl, & Jacob, 2010; Health Workforce Australia, 2013; Siggins Miller Consulting, 2012). However, given their geographic isolation and subsequent distance from University campuses, face-to-face attendance at information and education sessions is often limited. The needs of Tasmanian rural preceptors are consistent with those reported in the literature; therefore, during the last six years, a suite of resources has been developed and evaluated to support preceptors to gain a depth of understanding of the learning and teaching imperative.

Methodology

Methodologically, this paper draws on the work of Maryellen Weimer's Wisdom-of-Practice Scholarship where, through the 'lens of experience', support to preceptors in rural and remote areas of Tasmania was explored, analysed and critiqued (Weimer, 2006). In accordance with this methodological approach, subsequent changes in the delivery of educational resources to preceptors took into account the 'why' as well as the 'what', accurately detailing the review of context and logistics. Of significance, Weimer's 'personal accounts of change' approach encouraged objectivity, robust critique, identification of impact and evaluation of all change processes (Weimer, 2006). With the intention of providing high quality placement activity for students, the objective was to support preceptors in their role of teacher and to highlight learning and teaching within the rural healthcare domain. First and foremost, there was a need to extrapolate knowledge from practice and uncover the sometimes-unacknowledged teaching activity of registered nurse preceptors. It was essential to understand, gain perspective, legitimise and then justify a potential change process. According to Weimer, any change must relate to context and learning need. As such, providing clarity, an evidence-based rationale and

user-friendly dialogue was essential for revealing teaching practices that promote learning (Weimer, 2006) in healthcare settings.

Ethics approval was gained for individual projects that led to iterative changes in modes of support to rural preceptors, commencing with a needs assessment survey of non-traditional nursing placement providers within Tasmania during 2010 (H12527). Over time, analysis and critique led to the development and delivery of synchronous learning activities which included face-to-face interprofessional (H15242), on-campus simulation workshops (H12689) and video-conference sessions for preceptors (H12665). Additionally, a suite of asynchronous digital resources were developed and implemented, including introducing *e*portfolios into the Bachelor of Nursing curriculum (H11116) and initiating a blog and microblog (H13729) to provide preceptors with contemporary information to support their role as supervisor of undergraduate nurses.

Discussion

The Lens of Experience: The 'What' of Change

Connecting preceptors and students with the University
The commitment to innovative learning and teaching of students by preceptors in rural locations within Tasmania has a long history. Over time, new pressures have demanded change to traditional face-to-face learning and teaching opportunities for preceptors. By 2004, expectations of students and preceptors had altered sufficiently that there was a need for more structured support from the University for learning in rural healthcare settings. Cost and workplace safety issues associated with travel for maintaining support by faculty was demonstrated to be inefficient and unsafe. Digital innovation was beginning to emerge in urban areas; however, access to Internet networks in healthcare environments was low and connectivity was unreliable in most rural areas. To remediate this issue an audio-teleconferencing model with students was introduced into the undergraduate nursing curriculum to support both students and their preceptors (Mather & Marlow, 2012). This synchronous strategy of learning support evolved, as did access to the Internet and connectivity to 3G networks (Ogata & Uosaki, 2012).

Connecting preceptors and students with the University: ePortfolios
Concurrently, there was the development of smartphones with media capabilities and the parallel growth of digital platforms, including social media, designed for use with mobile or portable devices (Goggin, 2012; Pauleen, Campbell, Harmer, & Intezari, 2015). Improved accessibility to digital platforms enabled new innovations for communication between the University and preceptors at placement agencies to be trialled and evaluated. Simultaneously, digital innovation within the nursing curriculum to support student learning was also undertaken. *e*Portfolios were introduced into the undergraduate Bachelor of Nursing curriculum, providing students with access to reflection tools and collaborative networks during professional experience (Mather, 2012). However, software could only be accessed by desktop computers, as applications (known as apps) were not yet readily available. Limited availability of computers at some rural workplaces hindered access to this learning innovation. Sharing of student information with preceptors was also problematic and digital literacy of students and preceptors was varied (Mather, 2012).

Connecting preceptors with the scholarship of learning and teaching: blog and microblog
During 2012, to meet the need for providing rural preceptors with a conduit to contemporary information about supervision of students, a blog and microblog focussing on supervision were initiated. Information about the role and function of the preceptor has been posted daily on

Twitter. This microblog has open membership; anyone who joins Twitter can follow or un-follow the information posted as they choose. Members can access the platform when it is convenient and follow links to other information such as the Professional Experience blog. Contemporary information from peer reviewed and professional journals is curated, summarised and posted weekly to the blog (Mather & Cummings, 2014). Information about continuing professional development (CPD) courses or topics are also posted, enabling preceptors easy and convenient access to filtered information about supervision of students.

The microblog is a virtual community of practice (vCoP) where members can seek and retrieve information or ask questions about supervision (Mather & Cummings, 2014), enabling connection between a range of individuals interested in preceptorship of students in healthcare environments. Additionally, in 2012, twelve nurse leaders were selected to support preceptors and become change champions to promote digital literacy for preceptors in non-traditional healthcare environments. These nurses attended workshops aimed at developing their digital literacy which, in turn, enabled them to model digital proficiency and professionalism in the workplace. During their 12 months of employment, promoting the blog and microblog to preceptors was integral to their role (Mather, Marlow & Cummings, 2013).

Connecting preceptors to peers: video-conferencing
The 2010 needs assessment also found that collegiality between staff from differing rural placement sites was important to preceptors, as networking opportunities were considered valuable. It was noted however, that access to events which facilitated sharing ideas with preceptors in other rural settings was limited. A pilot study was undertaken to assess whether video-conferencing for education and peer networking met learning requirements to support student learning during professional experience. This study included monthly video-conferencing sessions over five months for preceptors within rural municipalities in northern Tasmania (Zournazis & Marlow, 2015). Topics for discussion were agreed upon in advance, as were proposed dates and suitable times.

Connecting preceptors to resources: Supporting Health Students in the Workplace website
In collaboration with the Tasmanian Clinical Education Network, a suite of online resources were developed, which included a free education module titled Supporting Health Students in the Workplace (Tasmanian Clinical Education Network, 2017). This module provides generic, contextual and user-friendly information to assist preceptors in developing an understanding of the scholarship of learning and teaching related to healthcare environments. It can be included as part of their own CPD and preceptors can log onto their individualised portal to complete the interactive activities as time permits. They can re-visit and refresh their learning within the portal as required. The website is also a repository for additional generic information for all health professionals who supervise learners within the workplace.

Connecting preceptors to interprofessional peers: face-to-face workshops
In response to the identified need to develop specific information for preceptors regarding their role in learning and teaching, workshop content was developed and delivered through collaborative endeavours between the Tasmanian Clinical Education Network and the University of Tasmania. The workshops were delivered face-to-face in mutually agreeable locations across the state. The content included information pertaining to the expectations of all stakeholders, cultural considerations when working alongside students from diverse backgrounds, how to provide and receive feedback, and information pertaining to learning to think like a nurse (Levett-Jones et al., 2010). Concurrently, through feedback and online surveys associated with the professional experience blog, there was a process for the self-identification of gaps in preceptor performance related to understanding the needs of the learner. Additional workshops for

preceptors from non-traditional healthcare environments were developed and delivered on campus. Participants were offered the opportunity to be immersed in a simulated environment to emulate being a novice student within a new workplace setting (Mather, McKay, & Allen, 2015). As outlined above, significant adjustments were made to enhance access to resources by rural preceptors. However, rather than merely detailing the intricacies involved in what was altered, it is also important to consider why adaptations were made. This enabled a depth of analysis, critique and subsequent evaluation, providing context and justification of activities (Weimer, 2006).

The Lens of Experience: The 'Why' of Change

The initiation and implementation of learning strategies occurred in response to a range of external factors and competing elements at a systems, organisation and individual level. This complex milieu of pressures enabled or hindered the success of supporting learning of rural-based preceptors in the workplace. The needs assessment (Mather et al., 2013) provided direction at an individual level that was leveraged at organisation and systems levels. Access to funding to support preceptors in rural areas through Commonwealth Government initiatives enabled timely development of online learning resources, delivery of video-conferencing, face-to-face workshops and support for nurse leaders to become digital literacy change champions. The learning opportunities provided through this funding promoted a multimethod learner-focussed approach and enabled engagement of preceptors to be user-led.

Systems level
The provision of funding from the Commonwealth Government to promote rural workforce initiatives enabled an increase in the number of opportunities for nursing students to undertake professional experience within rural healthcare environments in Tasmania. Prior to the receipt of this funding however, the 2010 needs assessment (Mather et al., 2013) identified the types of information and resources required by geographically isolated preceptors. Subsequently, two streams of educational strategies—synchronous and asynchronous—were initiated for supporting rural preceptorship.

Organisation level
Nursing is a highly regulated profession and maintenance of the Standards for Practice (Nursing and Midwifery Board of Australia, 2016a), as well as the need for evidence of annual CPD (Nursing and Midwifery Board of Australia, 2016c), has impacted how organisations approached workforce development. For continuation of registration as a nurse, individuals must complete 20 hours (or pro-rata hours) of CPD per year (Nursing and Midwifery Board of Australia, 2016c). The inclusion of mandated annual CPD has changed the perspective and expectations of organisations and their staff (Calvary Healthcare, 2017) when considering the range of educational opportunities on offer. Fortuitously, the need to meet the annual CPD Standard also created impetus for collaborative activity between the University and placement providers at an organisation level. This involved expanding the scope of learning to include support for individual nurses to learn about preceptorship and teaching students in practice. The needs assessment found preceptors wanted effective communication, timely access to up-to-date information and CPD at their workplace when required. As a result, the University initiated a range of learning opportunities to meet these needs and to legitimise the teaching role undertaken by rural registered nurses.

Individual level

At an individual level, preceptors indicated access to learning was preferable when a need was identified at the workplace (Mather & Marlow, 2012; Mather et al., 2013). Furthermore, due to the improved reliability and reducing cost of accessing the Internet, preceptors could now interact with colleagues and mentors anytime, anywhere, in real-time, which promoted collegiality and networking. Offering an opportunity to join an asynchronous vCoP, access contemporary information via the blog, or be part of synchronous discussions through video-conferencing were important steps for supporting preceptors situated within their rural communities, rather than the need for them to travel to undertake face-to-face professional development.

The Lens of Experience: The 'How' of Change

The needs assessment provided evidence that enabled direction for development of resources and support to preceptors in rural areas. The focus on providing students with a diverse range of placement opportunities across sectors and locations facilitated preparation and training of preceptors within new placement agencies by the University. The resulting impetus to support the learning for teachers of nursing students included trialling a number of educational strategies. These strategies included the development of synchronous and asynchronous educational support to meet the needs of preceptors by addressing self-identified gaps in their learning. Engaging learning through these two concurrent streams is explained chronologically.

ePortfolios

The introduction of 3G technology, including the National Broadband Network, has improved reliability of Internet access in rural areas. Personal ownership of mobile devices including laptop computers, tablets and smartphones has grown, resulting in improved Internet access for both preceptors and students. Learning to be digitally professional has been introduced into the undergraduate curriculum, and modelling of digital professionalism by preceptors in the workplace is now expected (Cummings, Shin, Mather & Hovenga, 2016). While the introduction of *e*portfolios into the nursing curriculum aimed to electronically connect students and preceptors, evaluation of the project found preceptors required additional education and guidance related to their digital and *e*health literacy. This, in turn, enabled them to model digital professionalism with students. Subsequently, strategies to enhance the educational preparation of preceptors to support students' engagement with digital professionalism were developed, implemented and evaluated.

Virtual community of practice

To connect rural preceptors with others and to ensure equitable access to information and resources, support was offered through the inception of a vCoP using the microblog. The vCoP enabled scaffolded learning through upskilling change champions to promote use of the microblog and blog by preceptors. This user-centred strategy focussed on easy and convenient access for preceptors to contemporary information. Additionally, fact sheets developed to show how to join and use the vCoP were accessible on the preceptor web pages hosted on the School of Nursing and Midwifery professional experience website. The vCoP was promoted at face-to-face sessions and information was distributed at workshops. To enable preparation for student arrival and retrieve upskilling information, including refreshing about supervision and to seek information about supervision courses available, preceptors can now access information hosted on the Supporting Health Students in the Workplace website (Tasmanian Clinical Education Network, 2017).

Video-conferencing

The needs assessment findings indicated preceptors valued networking with their colleagues to assist them with learning and teaching strategies. However, what preceptors indicated they wanted to support their learning for teaching and what they could actually commit to were different. Competing tensions between service delivery and learning about supervision of students was evident. Workload pressures and learning cultures within organisations reduced the opportunity for preceptors to attend scheduled sessions. Relevance of discussion topics and lack of capacity to network within this framework also reduced attendance (Zournazis & Marlow, 2015). The competing elements of synchronous attendance requirements and day-to-day work activity was cited as a barrier.

Supporting Health Students in the Workplace website

To contextualise information delivered at face-to-face workshops, a link to the Supporting Health Students in the Workplace suite of online resources was sent to all participants prior to attendance. This enabled greater interactivity at workshops and clarification of salient issues. Additionally, workshop attendees were able to re-visit the resources after the workshop and recommend it to colleagues who were unable to attend sessions. In collaboration with the microblog and blog, this site is a central repository for information and is specifically tailored to meet the needs of current and potential preceptors.

Supporting Health Students in the Workplace workshops

Workshops were delivered by a collegial team comprising staff from the Tasmanian Clinical Education Network and the University. Representative of the healthcare environment, workshops included attendees from myriad health professional groups. In addition to the focus on enabling preceptors to explore their own expectations as teachers, and to develop an understanding of the needs of the learner, each workshop addressed foundation supervision content that was tailored to the needs of the hosting facility and individual health professionals.

Simulation workshops

Workshop sessions relating to understanding the novice student were hosted away from rural settings due to the location of simulation equipment necessary to conduct the activities. The face-to-face immersive workshops were offered to all health professionals, however, over 95 percent of participants were nurses. Findings of this study were not surprising and indicated preceptors were more confident in their knowledge of care delivery and their workspace than the pedagogy associated with learning and support. It was identified that preceptors needed a framework for assisting students to recognise and reflect on 'learning moments' (Mather et al., 2015). The workshops also provided opportunities for participants to gain feedback on their behaviour associated with *teachable moments* (Sanderson & Lea, 2012, p.337).

Impact of Change

Connecting rural preceptors with scholarship pertaining to learning and teaching has revealed the benefits this information has to the workplace. Moreover, the development of collaborative and collegial links between education and health providers has highlighted the need for reciprocal relationships to ensure both students and preceptors are effectively supported.

Digital communication

Early in the development and trial of digital tools and resources, it was acknowledged there was complexity associated with provision of an effective and timely communication strategy to rural

preceptors. The rapid advance of digital platforms and growth in social media provided opportunities for easy and convenient access; however, there were systems, organisation and individual challenges that often inhibited potential learning opportunities by preceptors within healthcare environments (Mather et al., 2013). As reliability of the Internet improved within workplaces, preceptors were able to access information before, during and after student placement experiences. However, due to a range of barriers, preceptors began to find that guiding and supporting students using digital technology in real-time at the workplace was unavailable. This issue is not limited to those in rural areas and research regarding use of digital platforms in healthcare environments continues (Mather & Cummings, 2016). Over 260 blogs (University of Tasmania, 2017) and 2200 tweets (@PEPCommunity, 2017) have been published since inception in April 2012 and they continue as a resource to support learning about supervision of students. Furthermore, between 2013 and 2016, the Supporting Health Students in the Workplace website received over 500,000 website visits from over 15,000 unique visitors within 156 countries, suggesting preceptorship of health profession students is a topic of interest globally (Mythen, 2016).

Face-to-face communication

From evaluations, preceptors who undertook face-to-face workshops reported increased confidence in providing feedback, managing challenging students and feeling more confident in guiding culturally diverse students. Of significance however, preceptors valued networking and interacting with colleagues from other locations and other professions, sharing experiences and developing insight regarding the expectations of students. Thirty-nine Supporting Health Students in the Workplace workshops were held and delivered to over 870 staff at workplaces. Eleven of these were hosted in rural Tasmanian townships. On project completion, participants from 19 health professions had attended these workshops. Additionally, over 60 rural nurses participated in the on-campus simulation workshops (Mather et al., 2015).

Student feedback

Student evaluations collected at the end of each professional experience indicated their level of satisfaction with learning experiences. Over time, there has been an improvement in quality of placements, feelings of support and an increase in student confidence by the end of placement. The nature of the feedback has changed from students commenting on the performance of preceptors to reflecting on their own learning outcomes (Marlow & Saunders, 2016).

Prior to the increased focus on the provision of placement opportunities in non-traditional and rural locations, gaining professional experience within urban settings was considered the norm by students. Students now recognise the diversity of learning opportunities offered within rural settings, and these placements are coveted by students seeking a more wholistic experience. Moreover, there is acknowledgement of the value of learning in heterogeneous workplaces. Students recognise the high-level expertise needed by rural clinicians who undertake their role and function with reduced access to resources expected within urban areas. Some students indicated they value the close rapport with staff and patients enabled by being placed in a rural location. Furthermore, students have highlighted the benefits of being immersed within a rural community, which include developing a broad understanding of health service delivery and exposure to a range of experiences comprising community nursing, participating in school clinics and being a nurse in general practice (Zournazis, Marlow & Mather, in press). Students gain an insight into the difficulties faced by rural patients needing to travel for assessments, review and procedures. They also become aware of the need for appropriate and timely documentation and communication to enable continuity of patient care. Sometimes students who embrace learning within rural environments report being offered employment on completion of their degree. In

evaluations of placement, students often comment on the high level of respect they have for the expertise of rural preceptors and colleagues.

Measures of Success

To initiate any change process, Weimer (2006) reminds, it is important to consider the context, what might work, the justification and the needs of others. As such, each of the learning and teaching strategies implemented to support preceptors were evaluated using a range of techniques, with a particular focus on the 'lens of experience' (Weimer, 2006). Ethics approval was obtained prior to implementation of each step. Through evaluation of educational strategies, it was found some learning opportunities were more successful than others. At an individual level, what preceptors believed they wanted was different to their behaviour when provided with opportunity to participate in learning using digital platforms. At an organisation level, the video-conferencing pilot study demonstrated that although preceptors stated they would like to learn using this method, the reality was different due to a range of factors that were not necessarily within their control. Similarly, using digital media for learning and teaching within workplaces was met with barriers due to organisation policies and guidelines precluding access and use of technology.

Digital communication
The eportfolio project undertook pre- and post-use surveys of academic staff, nurses and students. The virtual stream used a range of web-based analytical tools that provided counts, length of time of visits and countries of origin of visitors to web pages and the blog. Retweeting of messages and how many posts penetrated into other members' accounts were tracked. Survey of users were undertaken through online questionnaires, and information was sought from potential users at workshops and preceptor education sessions held to provide specific unit information being delivered within the Bachelor of Nursing program. Additionally, numbers of accesses and completions of the online supervision modules were recorded and postal survey of video-conference participants was undertaken.

Face-to-face communication
Hard copy evaluation and feedback questionnaires were distributed to workshop participants. Additionally, participants in the immersive simulation workshops completed an online survey six weeks after conclusion of their session to investigate whether they had used the information or changed their behaviour in response to the experience. Over time, participants in the Supporting Health Students in the Workplace workshops were reminded of their personal learning objectives by being posted a card they had written at the workshop to remind them of their workshop learnings. This reminder was sent six weeks after completion of their workshop session.

Future Directions

Challenges
The evolution of learning resources provides challenges for the future of learning and teaching of preceptors in rural placement agencies. Easy and convenient access to contemporary relevant information is now expected by preceptors, which means sustainability of virtual tools will be central to any on-going educational strategy. The increased digital and ehealth literacy of health professionals provides further impetus for the University to ensure digital resources are up-to-date and continue to evolve to meet demands of the 21st century health workforce. Furthermore, a challenge for the future of supporting preceptors in rural locations is contraction or withdrawal

of funding, which is cause for concern. The implications include a reduction in the gains made over the last six years and a subsequent diminishment in capacity of placement facilities and capability of the workforce to juggle the competing priorities of health service provision and student learning. Maintaining a balance to meet the needs of all stakeholders is constant.

Opportunities

Regardless of the challenges faced, new opportunities emerge. To maintain momentum in developing a capable future rural health workforce, a range of tangible projects are in progress. These include approval for the development of a tool to evaluate students' perceptions of their learning whilst undertaking professional experience (Ethics approval H14623). The development of a professional experience website specifically promoting rural placement opportunities and available support is underway. Furthermore, alternate models of support for rural preceptors, which include the employment of local 'Whole of Community' facilitators, has been proposed (Zournazis et al., in press). This model will focus on building capacity of individual communities, rather than a single healthcare organisation, to host successful student placements. It is envisaged these facilitators will promote cross-sectoral interprofessional learning partnerships both within and external to health disciplines. Additionally, connecting rurally placed students of nursing to students from other disciplines, including preservice teachers, to engage in mutually beneficial course related activities may promote a broader understanding of the needs of rural communities from multiple perspectives.

Conclusion

Through the 'lens of experience', the use of Weimer's personal accounts of change methodology has enabled an in-depth critique, analysis and evaluation of the needs of preceptors related to supervision of nursing students. An exploration of the context of the learning and teaching landscape within rural nursing practice has highlighted the necessity for contemporary, accessible and relevant synchronous and asynchronous resources to support a highly capable future health workforce. With the focus of healthcare professionals on the provision of care to patients, learning and teaching is often considered as a secondary gain. What is evident however, is how environment impacts learning and, in particular, how people who are providing the teaching impact the learning experiences of students.

It is apparent that health and education providers need to work collaboratively to raise awareness of the benefits of rural placements for nursing students and acknowledge the impact of positive learning and teaching experiences for all. Collegiality is key, and with the timely changes to the Registered Nurse Standards of Practice, accountability for learning and teaching activity in healthcare settings is more overt. Most importantly, moving beyond discipline-specific knowledge and sharing information related to the scholarship of learning and teaching can add value to the student nurse/preceptor relationship within a healthcare context. Continued support of those who mentor, guide and teach nursing students in practice will contribute to the development of a capable future health workforce.

Acknowledgement

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