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Citation: Adams, M,
Yen, M 2024,
'Changing how 'rural'
is understood in
health professional
education', *Health
Education in Practice:
Journal of Research
for Professional
Learning*, vol. 7, no. 1
<https://doi.org/10.33996/hepj.7.1.17713>

Changing how 'rural' is understood in health professional education

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Abstract

Purpose: For students enrolled in tertiary education courses, learning to work rurally is mainly reliant on placement experiences. An international scoping review (Adams 2023) found that rural placement and other learning experiences are seldom supported by published evidence or evaluative research related to rural theory, specific curricula content, pedagogy or assessment. The implications of the scoping review findings are discussed using relevant theoretical perspectives. This argument aims to raise awareness amongst health professional educators of opportunities and outcomes that may support confident, capable, autonomous work in broader scopes of practice through specific, structured rural content in health professional curricula.

Approach: This article explores reasons for the seemingly limited presence of rural/remote concepts in health professional curricula and poses reflective questions for health professional educators to stimulate critique of current practices. Analysis of transformative learning underscores implications for placement and practice-based learning experiences.

Findings: Once theoretical foundations of rural education are established, structured evaluation of educational design and advancement of the scholarship of learning and teaching can occur.

Research implications: Extension of research into educational practice in rural contexts can contribute to rural health professional retention and improved health outcomes for rural populations.

Originality/value: This paper highlights a novel approach to rural health professional education for rural practice beyond standardised curricula delivered in rural contexts.

Limitations: The lack of published research does not mean that rural curricula and pedagogy do not exist in health professional curricula. Instead, it

highlights that rural health education rarely includes analysis/evaluation of health programme content.

Keywords: *Transformative learning theory, Mezirow, Educational design, Rural curriculum, Placement/PBE, Pedagogy*

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INTRODUCTION

Due to the complexity associated with healthcare in rural environments, broad scopes of practice, workforce limitations and the socio-political and economic influences on rural places, preparation for rural practice needs to stipulate education that prepares students for this practice environment. Health professional practice in rural contexts contrasts with highly specialised urban contexts with which students are more familiar as part of their 'metronormative' curricula that privileges urban values and practice types (Roberts et al. 2021, p. 302). The specialised nature of rural practice calls for curriculum approaches that are sensitive to the nuances of this context. This paper explores the distinctiveness of rurality, rural practice and its potential influences on curriculum, and the dominance of urban curriculum.

As rural contexts of practice can challenge students' current understandings of healthcare delivery, Mezirow's (1996) theory of Transformative Learning (TL) has been selected to frame practice recommendations. As an adult learning theory, TL uses an individual's prior understanding to develop new interpretations of experiences that can guide future action (Mezirow 1996). When combined with relevant curriculum and rural theory, it provides a valuable approach to challenge individual beliefs and provides opportunities for self-reflection and transformation of an individual's worldview. The discussion will address designing and researching rural-specific education, including exploring the role of hidden curriculum in distorting rural curricula.

Adams' (2023) scoping review presents a contemporary and comprehensive examination of existing research that takes a fresh approach to rural Health Professional Education (HPE). Adams' identification of five thematically significant areas of practice development relevant to rural education could be readily addressed by educators within health professional curricula. The themes relate to learning from the context (learning to think differently, relationships, and health leadership) and educational processes (curriculum and placement as pedagogy).

BACKGROUND

RURAL SCOPE OF PRACTICE

Generally, responsiveness to curriculum content that supports rural practice has been slow, with much of the literature dominated by medicine and nursing, although the distinctiveness is broadly similar to that of other health professional groups. Primary Health Care (PHC), an accepted model for rural health care delivery advocated at Alma Ata in 1978 and promoted by the World Health Organisation (Behzadifar et al. 2017), continues to have limited content in many health curricula. Failure to keep pace with PHC reform was documented in nursing literature in 2010 (Keleher et al. 2010), yet a decade later, fewer than 2% of 694 subject titles in a desktop review of tertiary undergraduate nursing degree programmes indicated a presence of PHC content (Murray-Parahi et al. 2020). This inadequacy highlights insufficient attention to education to prepare students for rural practice environments and supports assertions by Frenk et al. (2010) regarding failures to update curricula and pedagogies and support relevance to particular contexts.

Historically, rural nursing literature describes rural nursing roles as a specialist-generalist role grounded in PHC (Hegney 1996). Francis et al. (2002, p. 33) cite multiple studies calling for all rural health professionals to have specialist-generalist training; however, they found that new graduates entering rural contexts of practice ‘...are not prepared in any identifiable way for this practice.’ Recent literature supports a continued lack of specific educational preparation to work in rural practice contexts (Muirhead & Birks 2019; Roberts et al. 2021; World Health Organisation 2021). Muirhead and Birks (2019, p. 21) conclude that ‘Greater understanding of these roles is necessary to inform the development of ‘fit for purpose’ educational models.’

The long-standing lack of attention to rural-specific curricula, irrespective of the boundless volume of literature on rural nursing, is significant as nurses form the majority of the rural health workforce, continue to work in advanced generalist capacities and continue to feel unprepared for their roles (McCullough et al. 2021; Muirhead & Birks 2019). Educational support for the expanded scope of emergency care provided by rural nurses (Burrows et al. 2019) and continuing education that supports practice confidence have been identified as predictive of job satisfaction and pivotal to the retention of rural nurses (McElroy et al. 2022; Smith et al. 2021; World Health Organization 2021). *Rural* nurses need greater emergency capacity, whereas *remote* work requires greater emphasis on primary health care, paediatric health, health promotion and Indigenous cultural capabilities (Muirhead & Birks 2019). Other disciplines, such as Allied Health and Pharmacy, also report expanded scopes of rural practice (Dymmott et al. 2022; Taylor et al. 2021). As Adams (2023) found, these roles require specific curriculum content and teaching strategies for concepts not readily absorbed through practice-based learning or service-learning experiences.

Differences in the size of practice contexts have similar implications for health professional preparation. Students are often predominantly placed in regional referral hospitals, with one study of medical students observing that the larger regional sites provide an experience equivalent to urban facilities (Hanson et al. 2020). Page et al. (2016) partially attribute this to a lack of understanding from urban-based educators regarding what smaller settings can offer as learning experiences (Burman & Fahrenwald 2018; Page et al. 2016). Page et al. (2016) report that knowledge and clinical skills gained from rural placements are often equal to, if not better than, their urban peers. van Schalkwyk et al. (2012) claim that students experiencing rural placements see more patients, show more skill improvement and demonstrate a greater understanding of health systems and communities than those learning in non-rural settings.

The strength of small rural health services as rich learning contexts is significant because smaller rural health services with fewer than 50 beds constitute 71% of public hospital services in Australia (Sabeti & Barclay 2015). These services are affected by limited resources, broad scope of practice and professional isolation (Australian Commission on Safety and Quality in Health Care 2013). Furthermore, rural health professionals are part of a large portion of the health workforce who ‘...find themselves working in conditions significantly different than those they were educated in and for.’ (Roberts et al. 2021, p. 301). HPs in other isolated practice contexts, such as justice, defence, tourism and industry (Adams et al. 2019; Muirhead & Birks 2019), face similar challenges.

Despite ample recognition of the distinctiveness of rural places that should ideally inform rural education, there is a dearth of literature that addresses these vital contextual influences (Adams 2023). Literature from medicine reports that rural-based education opportunities consist of extended placements, community engagement and research. Although beyond that of other disciplines, education-specific research in rural/remote medical education remains primarily descriptive and lacks rigorous academic evaluation (Reeve et al. 2020). Research deficits across the scope of rural HPE include the need to address rural curriculum design, learning and teaching, learning assessment and programme evaluation (van Schalkwyk et al. 2012).

VALUING RURAL CURRICULA

The concept of curriculum can be elusive, but as a central tenet of this paper, it warrants definition. Curriculum consists of theory, pedagogies and assessment described by Lee et al. (2013) as a dynamic interaction of knowledge, action and identity. It connects cultural and historical factors relevant to the broader social, economic and political influences on the professions and aims to ‘...graduate safe, capable practitioners who are able to meet the healthcare needs of society’ Lee et al. (2013, p. 1). It consists of content, books, teaching and learning strategies, and assessment items that demonstrate learning achievement and direct student performance and teacher accountability. Consideration of curriculum as holistic, encompassing theory, pedagogy and context, places learning on a continuum from classroom to context and is a valuable concept for examining rural education.

Numerous concepts contribute to rural theory, which is considered essential to guiding the development of rural curriculum (Bourke et al. 2010a; Farmer et al. 2012). Equitable provision of health care rurally is affected by divergent ethical (Bell et al. 2010; Simpson & McDonald 2017), cultural, social and practice differences (Bell et al. 2010). Rural residents experience increased illness complexity and comorbidity (Vaughan & Edwards 2020) and service access difficulties that contribute to higher rates of chronic disease and poorer health outcomes than residents of metropolitan areas (Australian Institute of Health and Welfare 2022). While highlighting these differences is important, researchers are calling for power-laden deficit discourses related to rural health to be replaced by a more meaningful understanding of the distinctiveness of rural places that can evoke relevant change (Bourke et al. 2010b; Malatzky & Bourke 2016) and support ‘... consistency and integrity of what is taught’ (Bourke et al. 2010a, p.56). Pedagogy (variously defined as the art and science of teaching) consists of teaching methods, learning activities and assessments that impart learning to students. Pedagogies and theory are necessary to assist students to ‘make sense’ of their experience. Cornell-Swanson (2012, p. 207) emphasises this principle: ‘Thus, although field education is a critical element in thinking, performing and acting with integrity, it needs to be preceded by preparatory teaching of theoretical constructs, practical skill sets, and ethical codes of conduct’.

TACIT DOMINANCE OF METROPOLITAN CONTEXTS

Possible reasons for the lack of rural content, pedagogy and assessment include standardisation of curricula bound to metropolitan contexts, largely metropolitan universities and misrecognition of rural contexts. Metropolitan-focused policy and practice discourse affect rural practice

through the promotion of broad policy and practice guidelines that do not fit rural practice environments (Knight et al. 2015) and are more relevant to urban practice environments. Perhaps inadvertently, this has resulted in a deficit discourse related to rural health and an application of standardised policy and guidelines. Bourdieu (1989), whose work illuminates these relationships, maintains that this is how urban-dominant discourses become understood as the only valid knowledge that is recognised in a particular field, thereby controlling the entire field. Bourdieu's (1989) theory of practice is based on a mutual relationship between theory and practice that considers how personal experience shapes and is shaped by theory and practice (Grenfell 2008). ([Habitus & Capital] + Field = Practice). Bourdieu investigated interactions between habitus (subconscious dispositions derived from exposure to specific social conditions experienced and shared by others), capital (store of resources acquired through membership of a specific group) and field (environments with specific structures and positions). Gaps between prescriptive standards that do not fit rural operations and the ambiguities of unrecognised labour (Wears 2014) likewise contribute to the 'misrecognition' or invisibility of rural work, resulting in a lack of clearly defined rural roles and criteria.

Academic familiarity with rural contexts is another factor that limits the quality of rural learning. Few academics have rural practice backgrounds (Page et al. 2016), making way for standardised urban approaches to dominate (Roberts et al. 2021). Maley et al. (2009) advocate for more rural academics who can create rural-specific curriculum content. Many scholars come from health practitioner backgrounds and can struggle to identify as academics (Munro et al. 2018), lacking a solid background in theoretical foundations of education practice (McMillan 2007; Steketee & Bate 2013) to develop and deliver context-specific learning. This can lead to a focus on skills (Hanson et al. 2020) rather than on academic/theoretical knowledge, particularly in a competency-driven health education environment (Frenk et al. 2010; Lee et al. 2013) where the evidence for the effectiveness of education strategies is not esteemed (Goodyear 2018).

TRANSFORMATIVE LEARNING

Within the scoping review, some qualitative studies reported students feeling confronted by the health needs and practice differences they encountered in rural and remote locations. This conflict was the impetus for including Mezirow's (1996) theory of transformative learning as a means for considering the preparation of students for healthcare practice in rural contexts. The unique political, cultural, economic and social characteristics associated with rural communities present a fertile ground for challenging learning and using TL in the development of rural habitus or frame of reference. It allows students the opportunity to apply rural theory in context and explore how these contextual influences affect the health of rural residents differently from residents of urban communities. It also considers what this means for rural health professionals. Mezirow's (1996) theory of TL can be a valuable approach to challenge individual beliefs and provide opportunities for self-reflection and transformation of their worldview. TL is relevant to rural practice environments as it fosters self-reliance, critical thinking, a collaborative mindset, empathy and capacity for '...moral decision-making in situations of rapid change' (Mezirow 1997, p. 7). Shulman (2005a) asserts that for professionals to enact judgement in situations of uncertainty, pedagogies must link knowledge, practice and values. These skills can be vital where health professionals are challenged to work with

greater autonomy and increased scopes of practice in highly variable situations compounded by professional isolation and where there are few opportunities to defer decision-making (Lord et al. 2013) or consult with others. Skills developed as part of TL are consistent with many of the qualities such as self-reliance, empathy, connection with community and a strong sense of social justice found to be valued by rural health professionals (Adams 2023).

While many theoretical positions help to explain rural healthcare settings, it is useful to consider the ten steps outlined by Mezirow (1994) for guiding pedagogy relevant to teaching rural concepts that can prepare students for unfamiliar work contexts. Although, not all ten steps need to be utilised (Mezirow 1994). Bullen and Roberts (2018) found that the more steps that students were involved in, the more significant the reported change in attitudes. While students *become aware* of some social, cultural and practice differences (such as fewer resources and cultural differences) during placements (Adams 2023), there is scope to include explicit reference to contextual nuances within the accompanying curriculum. By being explicit, TL is more likely, and learning is not left to chance.

Furthermore, the predominantly urban frames of reference that students take to their rural placements present a significant learning challenge. Consistent with TL, educational support can offset student preconceptions and alter their frame of reference. This modification is essential as students otherwise risk rejecting concepts that do not fit their urban-dominant frame of reference. A frame of reference consists of habits of the mind and a point of view (Mezirow 1997). When thinking becomes habitual, thoughts are expressed through points of view composed of a complex mix of 'belief, value judgement, attitude, and feeling...' (Mezirow 1997, p. 6). These become habits of the mind, hand and heart that evolve into subconscious tools to think with in practice, which are provided by early socialisation into particular fields (Shulman 2005b, 2005c). Shulman (2005b) states that often, the three aspects of thinking, performing and acting with integrity are not given equal attention in the curriculum, which is supported by the emphasis on performing clinical skills (Bell et al. 2010; Hanson et al. 2020; Lee et al. 2013) that was also noted within the scoping review. The following table explains Mezirow's steps alongside practice implications identified within the scoping review findings.

Table 1. Lessons from applying Mezirow's (1994) TL theory to rural HPE

Steps in Mezirow's Theory	Review Findings	Education Opportunities
<p>1. Disorienting dilemma</p> <p>Mezirow defined encountering experiences that are not consistent with previous knowledge as a "Disorienting dilemma" (Brinson 2021, p. 1). 'Disorienting dilemmas' provide opportunities for students to question their assumptions, as outlined in the following section. The dilemma arises when the student is required to choose between two or more alternatives, both/all of which appear undesirable in some way. For example, embedded assumptions may conflict with an aspect of rural practice. Such tension demands reflective deliberation.</p>	<p>The literature review as part of the rural education review was framed within a social accountability ethos that values relationships, a strong sense of social justice, good communication skills and compassion and empathy towards rural health (Adams 2023). Rural placement experiences provided opportunities for students predisposed to strong attitudes towards social justice to want to return to rural and remote areas to advocate for policy and change and increased resource allocation (Adams 2023). During rural or remote clinical placements, students experience clinical, cultural, policy and economic differences and resource limitations that challenge their current knowledge (Adams 2023).</p>	<p>There are implications for educators to design and maximise opportunities for students to be exposed to situations or scenarios via problem-based learning (DeSapio 2017) that are likely to challenge their assumptions, such as exposure to health professional extended roles, resource limitations and health access difficulties experienced by patients that are not usually found in metropolitan health services.</p> <p>Opportunities exist not just in placement experiences to produce TL. Narrative-based story-telling can be introduced into subject design with the intention of evoking disorientation and producing a shift in perspective (DeSapio 2017).</p>
<p>2. A critical assessment of assumptions</p> <p>Mezirow (1994) advocates for students' early identification of assumptions, produced by their notions of 'reality' constructed over time as a consequence of their interaction with their socio-cultural worlds. Mezirow considers personally held assumptions as obstacles to learning and growth. Students' awareness of their assumptions forms the basis for deeper reflection and 'emancipatory learning' (Mezirow 1991) – learning that challenges and replaces basic and obstructive assumptions with those that are reflective of new meaning. The identification of existing assumptions forms the basis of learning, according to Mezirow.</p>	<p>Student self-reported reflections often noted situations or events that challenged previously-held assumptions however there was little documentation of educational processes to guide formal reflection or to consider where personal assumptions came from. This is not to say that this wasn't occurring, just that it wasn't being documented as formal educational research.</p>	<p>Cranton (2002) advocates the use of critical questioning or metaphor analysis as a means to allow students to consider what assumptions they hold and how they came to these beliefs.</p> <p>There is scope therefore, for educators to support students' articulation of pre-entry assumptions, which serve as a basis for later critical reflection on new experiences and 'disorienting dilemmas'.</p> <p>Leadership education that promotes opportunities to be confronted by unfamiliar health care settings need to be incorporated into health professional education to meet the demands of providing socially accountable healthcare (Chen 2018; van Diggele et al. 2020) which was supported in the</p>

		literature review (Adams 2023).
<p>3. Opportunities for Self-examination</p> <p>Learning from exposure to dilemmas or the dissonance between assumptions and experience demands critical reflection on assumptions and the tensions produced when aspects of rural practice are encountered (Mezirow 1991).</p>	<p>While Adams (2023) identified student exposure to events that challenged their assumptions, measures to identify and articulate these assumptions were not found in the literature that was evaluated that could provide a basis for identifying obstructive assumptions.</p>	<p>There is an opportunity for educators to support this process by guiding students' articulation and critical reflection on experiences, encouraging comparison and resolution of the tensions between their assumptions and the challenges brought about by new experiences and disorienting dilemmas. This process then serves as a basis for later critical reflection on new and related experiences and disorienting dilemmas.</p>
<p>4. Recognition that others have shared similar transformation</p> <p>The ability to share experiences and discuss them with others allows students to reframe experiences, develop additional points of view and validate meaning (Mezirow 1997).</p>	<p>Evidence of students meeting together to share experiences was rarely reported. One article noted that learning about each other's roles occurred socially, outside work hours in shared accommodation during an Inter-Professional Education placement. (Stilp & Reynolds 2019).</p>	<p>Sharing of experiences with other students can attract further challenge to pre-entry assumptions, relating to the context and to their understanding of their professional roles, and can support the development of deeper understanding and new meaning, as the essence of the transformational learning process.</p> <p>Students may be located in small, rural or remote locations and lack a way of meeting together for guided discussion of their experiences. Educators could consider a means of bringing rural students together such as facilitated online sessions.</p>
<p>5. Exploration of new roles or actions</p> <p>Mezirow suggests that new experiences allow students to identify new roles and create deeper relationships as they learn from others what is required of various roles (Brinson 2021). Mezirow asserts that students can form deeper relationships with others as they seek assistance while trying out new roles and applying new skills. However, the learning conditions depend upon a trusted</p>	<p>This was supported in part by the literature review, particularly regarding the influence of workplace mentors. Placement experiences could 'make or break' attitudes to future practice in rural health, therefore, interactions with community, educators/facilitators and health staff play an important role in socialising students into 'the rural', providing educational experiences and engaging in student assessment. However, students in rural and remote areas were challenged by a lack</p>	<p>There is an opportunity for educators to support students' development of new approaches to their roles and to rural practice. Students can test out new approaches to communication for example based on their new learning that has emerged from the previous stages 1-4.</p> <p>Connectedness with both professional and social communities was deemed pivotal to socialisation of students and to recruitment and retention of health staff. DeSapio (2017)</p>

<p>environment with a facilitator to foster autonomy, participation and collaboration supported by critical reflection activities (Brinson 2021).</p>	<p>of mentors, lack of dedicated teaching time, differing professional and placement schedules and insufficient resources (Adams 2023; Matoba, Hyodoh & Murakame 2021).</p>	<p>advocated that connectedness (though not part of Mezirow's theory) supports identity formation and that transformation can be evoked by activities such as participation in social and professional communities, opportunities for investment in organisational goals or commitment to justice and equity via socially accountable activities.</p> <p>Mezirow (1997) suggests that educators can help students to be autonomous, socially responsible thinkers by setting clear objectives and utilising a variety of educational strategies, including critical reflection, critical incidents and participation in social action, that allow students to incorporate new knowledge into existing frames of reference.</p>
<p>6. Development of a plan for action</p> <p>Development of a plan for action is integral to the cognitive response to the disharmony that emerges from a disorienting dilemma- the response that occurs when a new experience challenges established assumptions. During this affective phase, the learner may consider implications for future practice, including acquiring the knowledge and skills to support new practices, as discussed in phase 7. However, not all knowledge or meaning acquired from experience is applied to practice, as the learner ultimately decides what is important and relevant.</p>	<p>Developing action plans was not mentioned anywhere in the articles reviewed. Although there were instances where students were tasked with implementing community health strategies. The need for students to devise a plan, and any preparation for how to do this as a learning and teaching strategy was not mentioned in the literature (Adams 2023).</p>	<p>The dearth of literature on student planning represents a divergence from Mezirow's theory, which signals development of a plan of action or acquisition of knowledge and skills to support the plan as significant elements of transformational learning. However, recognition of the often tacit nature of learning, knowing and doing, described by Schön (2016) as knowing in action, contributes valuable understanding of the less visible process of planning or reframing and knowledge acquisition that occurs as practitioners interact with an experience.</p> <p>Planning within this process can be tacit, although reflection and articulation can support transformation of tacit knowledge into an explicit form that can contribute to the development of meaning (Raelin, 1997).</p>

<p>7. Acquisition of knowledge and skills for implementing the plan</p> <p>Learners look for information that will contribute to success in their new direction.</p>	<p>Commentary related to placement experiences dominated the literature review as the prevailing means for students to acquire knowledge about rural healthcare (Adams 2023). Within the literature reviewed, there was very little reference to supporting curriculum that would allow students to make sense of their placement experiences and understand fundamental differences in the characteristics of rural and remote environments, health systems and rural residents' attitudes to health.</p>	<p>There is scope for educators to support students' individual knowledge development in relation to the outcomes that have emerged from critical reflection on experiences, actions and recognition of their personal learning challenges.</p> <p>Generic content and learning experiences are relevant to group teaching strategies, however attention to measures that guide individual learning to guide transformative learning is also of relevance.</p> <p>Although TL has been criticised for offering too few strategies for translating theory into practice, it has been associated with identity formation utilising interactions between individuals and the social environment (DeSapio 2017).</p>
<p>8. Trying out the plan</p> <p>Transformation can promote action or behaviour change Mezirow (1990) as students explore new identities in a different context of practice.</p> <p>Mezirow's stages of transformative learning 1-8 provides a basis for student development of competence and self confidence in new roles.</p> <p>There is an implication here that students will continue to maintain critical awareness of practice through reflection and respond to new experiences with an awareness of the evolution of their pre-existing history and assumption.</p>	<p>The review indicated that students were often left to implement health programmes independently, however, there was little indication regarding what information they were given to support their decision-making and their need to act as advocates for policy and resources. This places students in the position of trying out a plan before or while they are still examining new perspectives rather than provide opportunities for students to try out new perspectives (Cranton 2002).</p> <p>Additionally, 'trying out the plan', particularly in developing countries, was often the only health care available and many students saw these projects as ad hoc and lacking continuity. There was little evidence documented of follow up to assist students to assess whether the plan was productive or could be improved.</p>	<p>Educators can support student adoption of reflective practice within their roles, to sustain the development of new meaning and recognition of personal change.</p> <p>Articulation of new experiences and the challenge of using knowledge and skill in new contexts through social learning can support learning during this post novice phase.</p>

<p>9. Development of competence and self-confidence in new roles</p> <p>and</p> <p>10. Reintegration into life on the basis of new perspectives</p> <p>While points 9 and 10 signal the final phases of Mezirow's theory, it is intended that students will continue to question assumptions, reflect on tensions and investigate ways to develop new meaning. There is an implication here that meaning making is not a finite process, and that questioning practice and personal assumptions will continue as new experiences are encountered.</p>		<p>There is scope to maximise students' continued engagement with rural practice once the practice is over.</p> <p>Students returning from rural placements are confronted once again with a disorienting dilemma as they engage with metropolitan contexts, which may contrast significantly with their practice contexts.</p> <p>A seamless curriculum that fosters integration of knowledge and practice capability across all learning experiences may support ongoing transformation.</p> <p>Educators can augment this process by sharing the reflective learning pedagogy with students as a learning experience (Marshall et al., 2022).</p>
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IMPLICATIONS FOR USING TRANSFORMATIVE LEARNING RURALLY

TL offers one type of opportunity to introduce students to rural health practice. In order to practice and refine their plan of action as per Mezirow's (1994) steps, students may require multiple opportunities to explore goals and experience transformation. These need not be limited to rural placements with practice-based learning and integration of rural content within curricula that provide complementary opportunities. Simply returning to urban environments where student goals may not be relevant further risks students returning to previous, more dominant frames of reference (Newman 2014). Reid et al. (2010) concurred with this position, claiming that short placements (in teacher education) may serve to confirm existing rural prejudices. Much of the proximate accounts of clinical placements documented in published student evaluations would likely be lost over time with exposure to more dominant urban-focused curricula content (Reid et al. 2011), as good experiences do not necessarily translate into durable habits of the mind or transformative learning. Owing to the differences in rural environments, students may find gaining sufficient confidence and competence challenging, thereby leading to a decreased desire to seek employment in rural areas. A central tenet of TL, reflective practice, is a core competency within health professional standards (Weller-Newton & Drummond-Young 2021). It applies to students during placement activities and all health professionals, including academics, who are responsible for seeking and applying the best teaching and learning strategies for given situations. Reflective practice is necessary to focus on self-evaluation to improve and develop one's practice through critical thinking and analytical skills to achieve best practice (Mantzourani et al. 2019). Similarly, Merriam (2004) argues that for transformative education to occur, a higher level of cognitive functioning is required to engage with

critical reflection and discourse. According to Mezirow, providing activities and time for critical reflection is pivotal to changing perspectives and developing new ways of thinking (Brinson 2021). However, Mezirow (1997) asserts that developing habits of the mind are more durable than points of view, suggesting that placements need to achieve more than simply exposing students to a rural environment.

DISCUSSION

DESIGNING AND RESEARCHING FOR RURAL LEARNING

In seeking to demonstrate how health professional students are *educationally* prepared to work in rural contexts of practice, the scoping review found that placement experiences were the dominant choice for most professions. The review mainly identified descriptive literature regarding placements with a paucity of theory, design or evaluative research that reflects constructively aligned rural curricula content, specific pedagogies and rural assessment as advocated in higher education (Biggs 2014). Much of the literature that is identified as 'rural education research' pertains to research related to students from rural backgrounds as well as recruitment and retention strategies rather than *educational* strategies per se (Dalton 2008). As Reeve et al. (2020, p. 10) assert, based on a review of remote HPE literature, 'Future research needs to include a description of the curricula used, inclusion of more rigorous and successful teaching and learning strategies, and evaluation of outcomes for and within the remote setting'.

Although the work of educators is influenced by regulatory agencies and social, political and corporate strategy, there are many opportunities to present rural practice to students and research innovative teaching and learning opportunities, including placement experiences. Research and evaluation of teaching and learning outcomes will allow education research to move beyond the primarily descriptive accounts occurring in HPE research globally (Frenk et al. 2010) and specifically in rural/remote HPE literature (Reeve et al. 2020). However, student satisfaction and self-reported learning lack rigorous academic evaluation of quality teaching and learning outcomes (Goodyear 2018). Simple descriptive accounts of placement experiences in the literature are disappointing, as many placements appear to require significant planning and community engagement that may meet learning needs. However, where this has not been explicitly evaluated, it either fails to contribute to rural scholarship or may be missing valuable opportunities to impart transformative learning owing to a lack of explicit design. As Reeve et al. (2020, p. 10) state, 'While articles have reported successful learning, it is not always clear how and why learning occurred and as a result of what type of intervention'.

The design of teaching practices, from a micro perspective, is another area that is considered to be unsupported by research in nursing education (Benner et al. 2010) and medicine (Reeve et al. 2020), with calls for greater recognition of specific rural practice differences, such as broader scope of practice, from other health professionals such as paramedicine (Batt, et al. 2015), pharmacy (Taylor et al. 2021), allied health (Cosgrave 2020; Dymmott et al. 2022) and physiotherapy (Martin et al. 2021). If students are to value rural primary health care principles and understand the relevance of social determinants of health, it will need to be designed, taught and assessed

effectively. Such explicit emphasis will demonstrate that rural constructs are valued by the academic community. This principle is significant, as we all know that assessment, in particular, motivates student learning, and it demonstrates what knowledge is valued by the professions (Burch & Reid 2011). Goodyear (2018, p. 9) argues for an increased focus on education design research and communication of design knowledge, stating that ‘... it is a wonder that we manage to educate anybody, whether in the health workforce or more broadly’. Opportunities to include rural content, apply rural-appropriate pedagogies and assess the effectiveness of these interventions can be employed to overcome urban-dominant curricula, hidden curricula and organisational rigidities.

THEORETICAL CONTENT

Theory has an important role in the education of health professionals. Place-based theories and critical theories are amongst the most prominent found in rural health literature. Reid (2011) argues for a fusion of critical pedagogy and place-based education, as the former is necessary to ‘challenge assumptions’ of the dominant educational discourses of accountability and economic competitiveness, and the latter to infuse meaning that is socially and ecologically relevant (Gruenewald 2003, p. 3). Therefore, the use of a critical pedagogy of place embedded in rural curricula would recognise unique learning contexts while situating this learning within the socio-economic and political inequalities that influence the health of rural people (Reid 2011). Critical pedagogies can produce transformative learning that positions health professionals to engage in action for equity and justice (Reid 2011). Preparation for complexity and improved receptiveness to the diversity of requirements for specific ‘places’ likewise allows health professionals to engage in socially accountable practice (Ross 2015) that fosters advocacy and leadership that can reduce health inequities.

However, it requires HPE to use transformative processes such as critical pedagogies (Ross 2015) that require specific curriculum change (van Schalkwyk et al. 2019). Thus, spatial and social justice are inextricable within individual social, economic and political conditions (Marcuse 2009; Soja 2010). Kitto et al. (2013) argue that space and place are poorly conceptualised in health education, which focuses on individuals rather than sociocultural learning contexts. Theory, such as specialist knowledge, ethical standards, professional values and regulated practice, are deemed necessary for professionalisation (Australian Council of Professions 2003). These attributes, considered to separate professionals from technicians, have been diluted by attention to competency-driven or outcomes-based curricula promulgated by shortages of qualified health professionals (Lee et al. 2013).

RURAL PEDAGOGIES

Placement is a common learning experience in HPE and has particular relevance to rural health education. Placement experiences in rural areas require students to ‘think differently’ via generalist, overlapping roles and with often considerable resource limitations. Frequently, students fill gaps in service provision that require them to exercise greater autonomy and initiative (Adams 2023). While rural clinical placements are considered pivotal to the recruitment of health professionals rurally, there is little research evidence published that their value is supported by theoretical, pedagogic and assessment strategies that are appropriate to rural

conditions. The scoping review provided little evidence of student supervision/mentoring, underpinning theory or a need to produce assessable outcomes from placement experiences to support a transformation in the student frame of reference. Lack of mentoring was attributed to inadequate teaching resources, infrastructure, and insufficient or absent quarantined teaching time. Although placement experiences expose students to opportunities favourable to transformative learning, the addition of transformative education principles, rural curriculum content and specific pedagogies can assist in supporting students to have the necessary autonomy and leadership capacity to thrive in rural health environments and to advocate for change (van Schalkwyk et al. 2012).

The manner in which rural theory, education theory, particular pedagogies and assessments are designed and integrated can have important implications for developing confidence and competence to work rurally. Buchman et al. (2016) highlight the need for concepts such as advocacy, communication with the community and social determinants of health to be taught and modelled within education. This is consistent with both transformative education theory and the need for the inclusion of rural theory to guide rural health curricula (Bourke et al. 2010a; Farmer et al. 2012) as it enables graduates to critically apply the ethical, social and cultural knowledge related to rural practice (Bell et al. 2010).

Although student placement accounts within the scoping review noted the importance of concepts such as good communication, there were no examples of how communication might need to be different in rural and remote locations. Good communication with the community, faculty and health professionals is necessary for students to understand different relationships and roles in rural health care and the community (Adams 2023). Curricula content, positive placement experiences and rural pedagogies are pivotal in forging positive and supportive relationships with health staff and community, which will influence attitudes toward rural health and rural work. However, while good communication skills are recognised as fundamental to social accountability, they are not well understood by students (Matthews & Van Wyk 2018) and are not documented in education research as being taught explicitly in particular ways during rural placements. For example, different communication strategies are used in rural areas due to the use of telehealth applications where the patient may not be visible to the consulting professional (Morony et al. 2018).

Additionally, the use of a supporting curriculum that deploys strategies that can unite health professionals who are situated sparsely (Anikeeva & Bywood 2013) would be useful to alleviate professional isolation. Specific pedagogical strategies could be employed to mitigate access, technical and familiarity concerns with the use of online teaching platforms, such as those suggested by Seymour-Walsh et al. (2020). Educators can design learning activities that foster students' integration of curriculum content with placement experiences. Examples of pedagogies identified within the scoping review consist of reflective journals, online learning, simulation and community-involved assessment. However, evidence that explains how these pedagogies might foster rural-specific knowledge and skills or why they are the most appropriate pedagogies to promote learning about rural practice was not identified. Far from being limited to rural settings, urban health professionals can apply rural skills and knowledge in urban settings (Bourke et al. 2010b).

ASSESSMENT

Although little has been written explicitly about applying rural-specific assessment within curricula, assessment can be used to focus student attention on rural content as valued (Burch & Reid 2011) and ‘closes the loop’ on educational processes (Sen Gupta & Murray 2011, p. 277). Rural-specific assessment items that aim to provide consistency have been proposed (Sen Gupta & Murray 2011), while community engagement (Baral 2016; Sen Gupta & Murray 2011) can provide authenticity and assess ‘attitude, communication empathy, compassion and relationship-building’ derived from student experiences (Baral 2016, p. 5). Assessment of non-clinical competencies explored by Bell et al. (2010) recommends the inclusion of content knowledge, contextual problem-solving, professional identity, ethical awareness, teamwork and concepts of public health. These knowledge areas can be included in assessment and can reflect the complexity and diversity of rural practice contexts valued in other practice contexts for their ‘holistic, interprofessional and community-based approach to complex health challenges’ (Bell et al. 2010, p. 31).

WHAT IS IN OUR HIDDEN CURRICULUM?

Equally important to what needs to be included in the taught curriculum is what might be tacitly conveyed to students via our hidden curriculum. Hidden curriculum refers to the unintentional transmission of ‘...assumptions and expectations that are not formally communicated, established or conveyed within the learning environment’ and refers to the ‘implicit values, behaviors, procedures and norms that exist in the educational setting’ (Alsubaie 2015, p. 125). Urban-dominant systems define what counts as legitimate knowledge, which is then portrayed as ‘normal’ and all else as ‘abnormal’ (Shucksmith 2012). Language used to communicate curriculum can contribute to symbolic violence (power disparity) (Bourdieu & Passeron 1977) and inequity by reinforcing rural as problematic, which creates social divisions (Reid et al. 2010). The subconscious use of language that inadvertently values urban specialisations can create in health professionals, a desire to return to ‘better’ or ‘normal’ urban positions as reported by Reid et al. (2010, p. 265) regarding rural teachers. Such ‘symbolic violence’ labels and insults rural work, while urban-based professionals are portrayed as ‘...somehow ‘better’...’. As Reid et al. (2010) also indicate, the persistent portrayal of rural as unfavourable reinforces a lack of symbolic capital that also translates into recruitment and retention challenges. Thus, careful attention to design elements when planning all aspects of curricula should consider language as well as whether ‘rural’ is being tacitly portrayed as not worth wasting time in understanding.

Having explored relevant literature and examined how and why the academic community should value rural-specific education, some questions are posed for health professional educators to reflect upon in the context of the inclusion of rural curricula content and education research within their practice.

- 1 Are rurality and understanding of the rural practice environment valued in the curriculum? Is it being included and assessed – demonstrating to students that it is valued knowledge, or is it being tacitly portrayed as an insignificant element of health curricula to be endured until a return to the ‘real’ metrocentric learning?

- 2 What is hidden curriculum inadvertently communicating to students about working in rural health?
- 3 Are we simply applying or adapting our favourite or existing teaching methodologies without considering how best to teach and assess concepts of rurality?
- 4 What are the opportunities to explore and research the application of innovative education design and pedagogies that can contribute to the scholarship of teaching and learning relevant to rural practice?

CONCLUSION

Health professionals entering rural health roles must navigate considerable differences in a politicised, complex, dynamic practice environment that demands expanded scopes of practice with little support. Therefore, what is included in health professional curricula has important implications for student learning that go well beyond compliance with regulatory and policy mandates. Constructive alignment of well-designed rural content has the potential to empower rural health professionals to have the confidence and competence to work in rural health settings. A number of theories, including TL, provide useful theoretical lenses through which to design student learning and maximise the benefit of learning experiences.

Rural theory presents many opportunities for explaining the distinctive nature of rural health practice that can contribute to professional development, health advocacy and preparedness to practice in unique and dynamic rural settings. The need to link knowledge, practice and values that enable health professionals to enact judgement in situations of uncertainty is particularly crucial in environments dependent upon greater autonomy and broader scopes of practice where there are few opportunities to defer decision-making and consult with others. This ability has important implications for the recruitment and retention of health professionals for rural practice and, ultimately, the health of rural populations. Finally, researching and documenting what works/doesn't work in designing rural educational strategies will be essential to forming evidence for rural curricula.

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