



Original Research - Qualitative

Development of a Model of Holistic Reflection to facilitate transformative learning in student midwives

Janice Bass^{a,*}, Jennifer Fenwick^{a,b}, Mary Sidebotham^{a,b}^a School of Nursing and Midwifery, Griffith University, University Drive, Meadowbrook, Queensland 4131, Australia^b Menzies Health Institute Qld, Griffith University, Queensland 4131, Australia

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ABSTRACT

Background: Reflective practice is considered an essential aspect of personal and professional development, and critical reflection is considered the cornerstone of being an accountable and autonomous practitioner. Tertiary education should lay the foundations of lifelong learning by ensuring students develop into critically reflective and reflexive practitioners, who demonstrate self-awareness and an ability to reflect on personal values and beliefs and their impact on the wider healthcare system. This level of reflective practice is essential to effect change at both an individual and societal level. Reflection should therefore be embedded into education programs as a learning, teaching and assessment strategy.

Aim: The aim of this paper is to describe a structured Model of Holistic Reflection embedded within an Australian Bachelor of Midwifery Program. The paper firstly outlines the theoretical and conceptual underpinnings of the newly developed model. Secondly describes the six integrated and inter-dependant phases of the model.

Discussion and conclusion: The aim of developing the Holistic Reflective Model was to produce a sound educational tool to assist midwifery students to progressively build reflexivity and reflective practice. Furthermore, provide midwifery academics with an educational resource to facilitate development of reflective and critical thinking skills in students. The specific intention was to promote deep personal and transformative learning across an entry to practice program. This paper highlights a number of ways the model can be embedded within the curriculum to support the scaffolded development of critical reflection and reflexivity required to facilitate transformative learning. While evaluation is required the model may have transferability to other disciplines.

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Statement of significance

Problem or issue

Reflection is recognised as a core professional competency however a model of reflection incorporating a structured guided process specifically designed for midwives does not exist.

What is already known

Reflection supports development of critical thinking and integration of theory and practice. When students are introduced early to a structured model of reflection they continue to demonstrate continued use of reflection.

What this paper adds

Development of a structured Model of Holistic Reflection embedded within a transformative learning framework, promoting deep personal learning and transformation at an individual and societal level. Provides learners and educators with a tool to develop critical reflection, reflexivity and reflective practice in midwifery students.

* Corresponding author at: School of Nursing and Midwifery, Griffith University, Logan campus, University Drive, Meadowbrook, QLD 4131, Australia.
Fax: +61 7 3382 1277.

E-mail address: j.bass@griffith.edu.au (J. Bass).

1. Introduction

Reflective practice is considered an essential aspect of personal and professional development as a midwife,¹ and critical reflection is considered the cornerstone of being an accountable and autonomous practitioner.² Reflection is one of the main learning approaches endorsed by professional, statutory and regulatory bodies to promote the development of knowledgeable and competent practitioners.^{3,4} In Australia the accreditation standards for entry to practice midwifery programs require a contemporary educational philosophy underpinning program design and delivery.² This includes scaffolded learning and teaching approaches that encourage the development and application of critical thinking and reflective practice to facilitate the integration of theory and practice.² From a learner perspective reflection provides an opportunity to explore practice experience, and integrate existing knowledge with new insights and understanding. Undertaking this process helps learners avoid ritualistic or routine approaches to care as a result of unexamined knowledge and experience.⁵

Historically midwifery academics have drawn from models of reflection predominantly designed for nursing and/or education to guide the development of reflective practice. These models have not reflected the woman centred and holistic philosophy that underpins midwifery practice and education. Currently there is no model designed exclusively for midwives that reflects the unique holistic nature of midwifery practice.

In this paper we describe the development, design and utility of a Model of Holistic Reflection. In undertaking this task we aimed to produce a sound educational tool that would assist midwifery academics support students progressively build reflective and critical thinking skills, with the specific intention of promoting deep personal and transformative learning across the student's entry to practice program. The overarching goal was to foster reflective practitioners who exercise critical reflection and reflexivity to create change at both an individual and social level.

2. Conceptualising reflection

The first task undertaken by the team was an extensive review of the literature and the development of an underpinning conceptual framework. It is beyond the scope of this paper to fully explore all the underpinning concepts, therefore the theoretical and conceptual framework has been summarised in [Appendix A](#). However the principles that guided the development of the Model of Holistic Reflection are provided in [Table 1](#). What follows in the next section is a brief summary to orientate the reader to how the team conceptualised reflection and the role it plays in supporting transformational learning.

2.1. Reflection: a key concept in learning

Dewey a philosopher and education reformer was among the first to identify reflection as a specialised form of thinking and a key concept in transformative learning. A defining condition of being human is that we have to understand the meaning of our experience and in his account '*How we think*' Dewey⁶ emphasised the importance of 'learning to think well' through reflection. Dewey identified four criteria that underpin his theory including reflection as a rigorous and systematic process, occurring through interaction within community, values personal and intellectual growth of self and others, and involves meaning making from experience. Collectively these combine so that reflection becomes a purposeful consideration of the basis and consequences of our beliefs, that once examined, can lead to seeing the world in a new and/or different way.⁶ Learning through experience lies at the heart of Dewey's notion of transformative learning.

Mezirow⁷ further developed Dewey's notions of transformative and reflective learning arguing that to achieve change at both the personal and societal level the process needs to involve a recognition and analysis of taken-for-granted assumptions.⁸ Also of significance is the importance placed on communication with

Table 1

Guiding principles and theory underpinning development of the Holistic Reflection Model.

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- Transformative learning^{6–8}
 - Transformational education learning as intuitive & emotional process^{6,47}
 - Holistic midwife practitioners art & science of practice; Holistic practice⁴⁴
 - Holism,²⁷ Holistic systems theory^{56,57}
 - Holistic paradigm – Holistic ways knowing & being²⁹
 - Philosophy phenomenology focus lived experience & personal consciousness
 - Multiple intelligences, IQ, EQi, SQi^{31,58,59}
 - Patterns of knowing³³ socio-political⁴⁰ unknowing,⁴¹ constructed knowing³²
 - Critical theory fosters emancipation,^{8,23,60} integrates cognitive, affective & emotional domains
 - Integrate swampy lowlands professional practice as professional artistry,¹⁰ developmental levels of reflection from surface to deep, technical to critical⁴⁵
 - Models of reflection iterative, structured & holistic, structured reflection (MSR)⁴⁴
 - Reflection surface level vs. critical reflection deep personal learning
 - Critical reflection social & political analysis transformative social action & change
 - Reflexivity practice involving both personal reflection & social critique
 - Reflective practice synthesis reflection, self-awareness & critical thinking
 - Awareness, presence, mindfulness
-

others that can cause ‘a shift’ leading to a more inclusive world view.⁷ Significantly Mezirow made the point that learning does not occur as a direct result of the experience. Rather the learner must consciously self-manage their learning by planning and actively being a critical reflector. When this occurs one’s perspective not only changes but learning becomes transformative and one’s way of being in the world is transformed.⁹ This has implications for design of learning and teaching strategies that include opportunities for introspection and discourse through interaction with others within a learning community.

The emphasis on learning from experience also underpins Schön’s¹⁰ seminal work that heralded the concept of reflective practice and how professionals think in action. The focus of Schön’s work was on the process of becoming a reflective practitioner who reflects both in the moment (reflection-in action) and after the event (reflection-on-action). Schön¹⁰ describes the ability to ‘think on one’s feet’ as the hallmark of ‘professional artistry’ gained through experience that becomes knowing-in-action. Schön¹⁰ also identified that to develop as a reflective practitioner it was important to explore diverse ways of knowing and understand the benefits of constructing different ways of thinking. He argued it was necessary to acknowledge reflection as an intellectual and emotional process. Others have also claimed that both cognitive and affective skills are a prerequisite for reflection (see for example Atkins and Murphy¹¹; Boud et al.¹²). More recently Finlay¹³ wrote that these skills need to be combined in the ‘processes of self-awareness, critical analysis, synthesis and evaluation’ (pg. 4). Therefore it is important to ensure that any model of reflection fosters development of each of these skills, as they are essential to the development of critical reflection, reflexivity and reflective practice.

2.2. Levels of reflection

2.2.1. Reflective practice

Reflective practice is a powerful self-development process that has the potential to transform practice and is generally advocated for all professions whose members work with people.^{13,14} As such reflective practice is described as the ‘bedrock of professional identity’ and a professional imperative.¹⁵ Despite the dearth of evidence demonstrating the actual impact of reflection on professional practice,¹⁶ reflection and reflective practice are generally regarded as essential attributes of competent health care professionals.¹⁷ Reflective capacity is also associated with the ability to adapt to rapidly changing health care contexts.¹⁷ Furthermore the knowledge generated through reflection in and on practice can act as a bridge from ‘tacit knowing’ to ‘considered action’; a trademark of professional artistry.¹⁸

2.2.2. Critical reflection

The recent emergence of critical reflection is designed to promote deeper and broader exploration of social and political discourse. The addition of ‘critical’ to the word ‘reflection’ means to reflect through the lens of Critical Theory.^{8,19,20} The power of critical reflection is the potential it provides learners to explore the world drawing on multiple ways of knowing. Reynolds²¹ describes four characteristics of critical reflection; questioning of assumptions; social focus; analysis of power; and pursuit of emancipation. The ability to critically reflect begins with self-awareness and examination of personal values, beliefs and assumptions that may have been unconsciously embedded within a personal worldview. Mezirow²² refers to these as ‘meaning perspectives’ that influence perception and interpretation of situations in life. The intent of critical reflection is to facilitate a person’s ability to bring about social change and action; in other words ‘enact’ transformation.²³

2.2.3. Reflexivity

Self-reflection, also termed reflexivity, is identified as being integral to critical reflection.²⁴ Reflexivity is generally associated with higher levels of self-awareness that occur through continuous self-reflection whilst also critically reflecting on the wider social and political context. In this way reflexivity appears to represent a form of meta-reflection where the mirror is turned on all the internal and external influences as part of reflective practice.

Reflexivity represents awareness of personal agency and ability to shape the process and outcome of a situation in action. Fook et al.²³ argued that reflexivity cultivates self-awareness through recognising one’s own influence on the environment, and what is learned about the self, including strengths and areas for improvement. By developing self-reflexivity the learner reflects at a deeper personal level on values, beliefs and assumptions that influence the experience.

Finlay and Gough²⁵ have identified a conceptual continuum with reflection and reflexivity at either end with critical reflection located in between. This clearly identifies the inter-related and inter-dependant nature of reflection, critical reflection and reflexivity. Combining these concepts mean that a reflective practitioner is someone who ‘lives’ reflection as a way of ‘being’ rather than just ‘doing’.^{18,26}

2.3. Holism in reflection

The philosophical perspective of holism²⁷ has emerged relatively recently within the caring professions. This reflects increasing emphasis on holism as a philosophy that offers a more holistic, integrative and unified theory of knowledge in contrast to a reductionist world view.²⁸ Davis-Floyd²⁹ drew on the concepts of technocracy, humanism and holism to describe an integrated model of medicine. In this work she suggests that practitioners relate more to the technocratic or humanistic models of care that are informed by scientific empirical knowledge. The holistic model of care, however, values the knowledge gained from practice and reflects the artistry of professional practice. Davis-Floyd’s²⁹ paradigms provide midwives with an integrative approach that combines models of care with ways of knowing. These concepts can be drawn on as part of reflection to make explicit the theory embedded in practice. Johns²⁶ integrates the concept of the holistic and reflective practitioner stating that the skill and creativity of engaged reflection is the hallmark of professional practice.

In education the philosophy of holism has been framed within a transformational model with a focus on the interconnectedness of experience and reality achieved through principles of connection, inclusion and balance.³⁰ Viewed in this way holistic educational approaches incorporate constructive use of evolving, alternate views of reality and multiple ways of knowing.³⁰ A holistic approach to education encourages an individualised and pluralistic approach that helps learners develop and use all of their senses and multiple intelligences when gathering, processing and recalling information.³¹ Similarly the learner is encouraged to reflect deeply on their learning and examine the experience from different perspectives using lenses drawn from diverse forms of knowing.^{29,32,33} Holism recognises the importance of the personal alongside intellectual and vocational development that includes the physical, social, cultural, moral, aesthetic, creative and spiritual aspects of learning.³⁴ This is designed to foster a deeper sense of connection to self and soul, and inclusion of diverse cultural backgrounds and learning styles.³⁵

2.4. Transformative learning

Learning needs to be transformative both from a personal as well as a professional perspective.

Gibbs,³⁶ a scholar of learning and teaching, drew on the earlier work of Kolb³⁷ to develop a process of structured debriefing to facilitate reflection. From this work emerged an iterative reflective cycle which emphasised ‘learning by doing’.³⁶ This approach to ‘reflecting on experience’ is very relevant within health care education where learners develop practice, knowledge and skills through real world experience, ensuring that professional knowledge is grounded in practice. However, one of the criticisms of Gibb’s model is the focus on reflection on action, whereas practitioners working within the current health care context also need to develop the higher order skills of critical reflection. This is considered essential to developing autonomous, critically reflective and reflexive practitioners, who move beyond questions about practice to critically examining the values, beliefs and assumptions that inform practice.

In response, frameworks to support critical reflection and transformation have recently emerged that encourage the practitioner to reflect inwardly on personal and professional belief systems, and outwardly on their practice and the wider social and political conditions on which practice is situated.²⁴ This also serves to address the potential introspective nature of reflection, without weakening the important development of self-awareness that is considered essential to the process of successful reflection.³⁸ In addition and as previous eluded to, different levels of reflection speak to the complexity of reflection supporting the developmental nature of reflective skills.^{10,24,39}

Taking this approach acknowledges that learners require different levels of reflection to respond to needs and scaffold learning.¹² This introduces the notion of levels of reflection or a staged approach to reflect depth and breadth of reflection from descriptive, reflective to a critical or transformational level.

2.5. Models of reflection

When reviewing the evolution of conceptual frameworks to support reflection it is evident that there are different types and levels of reflection. Often type refers to the content or purpose of reflection, whereas level indicates a staged process in the development of reflective skills. The early work of Carper³³ was fundamental in providing a typology of ways of knowing based on empirical, ethical, personal, aesthetic. This model was later developed to include socio-political knowledge,⁴⁰ and the pattern of ‘unknowing’.⁴¹ Habermas⁴² identified a typology based on three knowledge domains including technical with a focus on empirical evidence, practical or communicative developed through language and interpretation, and emancipatory developed by reflection

based on critical theory. Platzer et al.⁴³ continued the debate arguing that learning through reflection was more potent if there was a framework that encouraged a structural process to guide the act of reflection. The strength of structured models of reflection identified by Platzer et al.,⁴³ is the explicit use of forms of knowing to provide an epistemological base to reflection.

The use of a structured model of reflection is further supported by Johns,²⁶ who identified the impact of guided reflection on knowing and realising desirable practice. Johns⁴⁴ argued that an important purpose of reflection was learning through everyday experiences towards realisation of a personal vision, and integration of the idealised vision of practice as a lived reality. Reflection then becomes a critical and reflexive process of self-inquiry and transformation of being and becoming the person (midwife) we aspire to be. Central to this is the development of self-awareness cultivated through reflection in action. Currently there is no model that integrates forms of knowing with midwifery philosophy that are embedded within a structured Model of Holistic Reflection designed to promote deep personal and transformational learning.

Considering the work of van Mannen⁴⁵ is also helpful here. He described three levels of reflection including technical, practical, and critical. Level one involves technical rationality concerned with reflection on the appropriateness of the knowledge applied to the situation, however, does not question the purpose. Level two involves practical reflection on the value, moral and ethical assumptions that underpin the basis for practical action. Finally, level three is critical reflection upon the socio-political influences that systematically and ideologically shape practice. Critical reflection and reflexivity are thus inter-related.

In addition Fook et al.,²³ states that any model of reflection used to foster the development of critical reflection must include a structured set of activities that develop reflective practice as a theoretical understanding of day-to-day practice. This supports the work of Noveletsky-Rosenthal and Solomon⁴⁶ who demonstrated that the use of a structured model of reflection (MSR) enabled practitioners to develop solution focused thinking and work towards resolving the feelings and contradictions that practitioners are frequently faced with. A structured approach has been tested and found to be beneficial in enabling students to develop self-awareness and caring potential.³⁹

2.6. Summary and underpinning framework

In summary reflection is known to generate a particular form of knowledge that is based on the human motivation to find meaning, and understand the environment through interpretation and

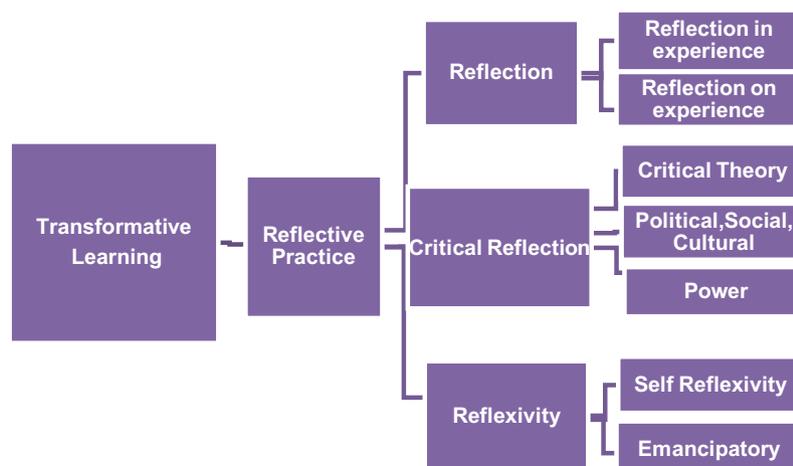


Fig. 1. Conceptual framework underpinning the Holistic Reflection Model.

integration of ideas.^{6,42} Furthermore reflection is beneficial in supporting learning from experience,⁶ transforming learning,⁷ developing critical thinking,⁸ enabling integration of theory and practice¹² and generating knowledge in practice.¹⁰ In general, reflective practice is understood as the process of learning through and from experience towards gaining new insights of self and/or practice.^{12,22,47,48} This often involves examining assumptions of everyday practice. Reflection also tends to involve the individual practitioner in being self-aware and critically evaluating their own responses to practice situations. The point is to recapture practice experiences and mull them over critically in order to gain new understandings and so improve future practice. The processes involved should be iterative, forward moving and spiral from practice to theory, and theory to practice. More recently reflective practice, critical reflection and reflexivity are terms that have been associated with levels of reflection promoting deep personal learning⁴⁹ and transformation at a personal and social level.²⁶ Fig. 1 combines all these concepts together in a conceptual framework that underpins the Holistic Reflection Model.

3. The Holistic Reflection Model

The Holistic Reflection Model was underpinned by the concepts depicted in Fig. 1 and designed to integrate a structured, hierarchical and iterative approach emphasising the developmental, dialectic and interdependent nature of reflection. The model uses six integrated, inter-dependant phases designed to promote detailed critical reflection at a deeper personal and holistic level as the learner progresses through the program. The phases are representative of reflection as a holistic continuum as depicted by the circular design (see Fig. 2). This approach reflects the work of

Johns²⁶ and Taylor⁵⁰ both of whom emphasise reflection as more spiral in nature as opposed to linear.

A conceptual continuum of reflection has been embedded within the holistic model with reflection and reflexivity at either end with critical reflection located in between.²⁵ These are represented as a series of inter-related circles reflecting the integrative nature of reflection, critical reflection and reflexivity characteristic of holistic models of reflection. These are integral and contribute to the development of holistic reflective practice throughout the continuum of the learning cycle.

3.1. The six phases of reflection

In phase one, the learner is encouraged to maintain an open mind and capture thoughts, emotions and responses during the actual experience. Also before writing the reflection identify present state including current thoughts and feelings as this may influence perception of events.

In phase two the learner is asked to provide a detailed factual description of the experience they are reflecting on. The ability to provide rich description enables clear gathering of facts to ensure the whole picture of the event is recalled and considered. This cultivates the skills of observation, recall and attention to detail. Of particular importance here is identification of what was significant and why this is considered so important to reflect on in greater depth in phase three of the process.

Phase three requires the learner to explore in greater depth and breadth the thoughts, feelings, and actions of self and others. Also to examine underpinning values, beliefs and assumptions related to the experience to develop critical reflection. This includes reflection on personal influence during the experience, reflecting

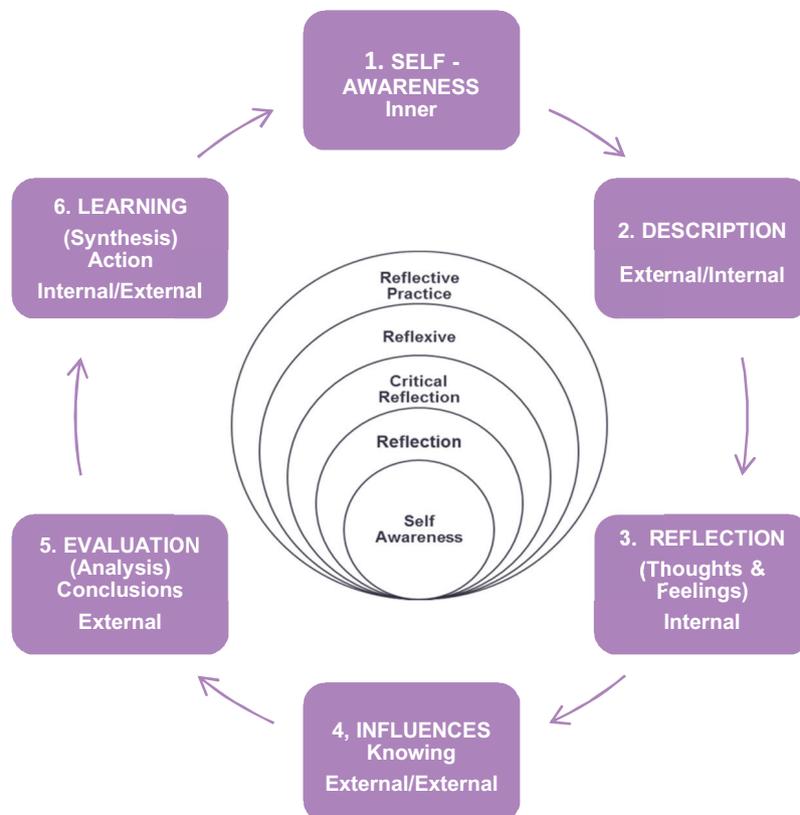


Fig. 2. The Holistic Reflection Model.

on oneself as part of cultivating reflexivity. Thus reflection on experience provides a deeper level of connection and engagement that enables the learner to begin to make sense of the experience.

Phase four draws on diverse ways knowing to explore the experience in a holistic manner. The learner draws on current level of knowledge and experience to explore what happened, and what factors contributed to the outcome through multiple lenses. The learner is encouraged to draw from diverse forms of evidence and ways of knowing for example Carper's³³ patterns of knowing, Belenky et al.,³² or Davis-Floyd's²⁹ holistic paradigm. As the learner grows in knowledge and practice experience the capacity to reflect from a wider knowledge base develops skills in critical reflection.

In phase five the learner is asked to engage in an evaluative process. Here the focus is on objectively stepping back from the event and critically analysing in-depth, aspects of the experience that went well, or resulted in an unexpected outcome. This information is used to identify how things could be done differently in the future using a solution-focused approach. The power of critical reflection is the potential it provides learners to

explore the world drawing on multiple ways of knowing. Mezirow²² describes four characteristics of critical reflection; questioning of assumptions; social focus; analysis of power; and pursuit of emancipation. Therefore the model is enabling the student to prepare for holistic integration of the experience developing the capacity for reflexivity.

Phase six moves the student into the phase of transformational learning. Here the student is asked to synthesise and integrate the evidence reviewed during the reflective process and identify what they have learned about themselves and others from their in-depth reflection on this experience. In particular students are encouraged to identify any changes in perspective that may have occurred. In addition to internalising what they have learned – any future learning goals are identified along with a plan to achieve those goals. The key focus of this final stage is identification of how they will translate this learning into their practice, in order to become a reflective practitioner. Furthermore the translation of learning into action indicates transformative learning has occurred. Learners are also provided with guidance and prompts to enable them to use each stage of the model to explore and subsequently learn from their practice experiences (see [Table 2](#)).

Table 2

Guidance and prompts for students when using the Holistic Reflection Model.

The Bass model of Holistic Reflection: student guidelines and prompts Adapted from Gibbs, ³⁶ Cranton ⁹ and Johns ⁴⁴
<p>Phase 1: self awareness Find a safe space to focus, to become mindful and present to self and others. Pay attention to your thoughts and emotions and write down those that appear to be significant at this time</p>
<p>Phase 2: description Describe in detail the experience you are reflecting on: Include where you were; who else was there; why were you there; what were you doing; what others were doing; what was the context; what happened; what was your part in this; what parts did the other people play; what was the result. Identify the key issues within this description that you need to pay attention to? Write a description of your thoughts and feelings at the time but do not analyse these</p>
<p>Phase 3: reflection Recall and explore your thoughts and feelings include: What was I trying to achieve? Why did I act as I did? What are the consequences of my actions for the woman and her family, for me and for the people I work with? How did I feel about this experience when it was happening? How did the woman feel about it? How do I know how the woman felt about it? What was I thinking during the experience? How did other people make me feel? How did the situation make me feel? How did I feel about the outcome of the event? Think holistically about the experience. Include what you think or feel now</p>
<p>Phase 4: knowing Explore the experience from different perspectives identify the internal (you) and external factors (environment/others) that influence the experience. Draw on paradigms that influence philosophy and models of care and identify what approach was evident. What internal factors influenced my decision-making and actions? What external factors influenced my decision-making and actions? What sources of knowledge did, or should have, influenced my decision-making and actions?</p> <ul style="list-style-type: none"> • Empirics – scientific • Ethics – moral knowledge • Personal – self-awareness, previous experience, intuitive • Aesthetics – creative, art of practice, intuition • Socio-political – dominant ideas, theories that influence health care provision • Unknowing – uncertainty • Technocratic, humanistic, holistic approach • Constructed, connected and separate ways of knowing
<p>Phase 5: evaluation (analysis) You explored the issue from different perspectives in stage four providing a lot of information on which to base your judgement. The purpose now is to consider if you could have dealt with the situation differently? During this phase you should ask yourself what you could I have done differently and explore alternative strategies. Evaluate or make a judgement about what has happened including what was good about the experience and what did not go so well. Relate the decisions to the holistic midwifery paradigm include: What went well? What did I do well? What did others do well? What went wrong or did not turn out how it should have done? In what way did I or others contribute to this? How could I handle this better? What other choices did I have? What would be the consequences of these choices? How did the operating paradigm influence the practice outcome? How could another paradigm influence the outcome?</p>
<p>Phase 6: learning (synthesis) How do I feel now about this experience? What did I learn from the situation? Have I taken effective action to support others and myself as a result of this experience? How have I made sense of this experience in light of past experiences? What actions do I plan to take forward? What plans do I have to share my experience to support learning? In what way has this experience supported me in my journey to become a Midwife? Has this experience informed my understanding of practice at a deep personal level? Has the experience provided any insights about holistic midwifery practice? In what way has this experience transformed my personal & midwifery practice perspective?</p>

Table 3
Integration of levels of reflection with reflective practice.

Level 1	Level 2	Level 3
Novice: descriptive reflection Level: surface, technical Paradigm: technocratic Ways of knowing separation, empirical, personal, aesthetic	Practical: dialogic reflection Level: medium, practical Paradigm: humanistic Ways of knowing: connection personal, aesthetic, empirical, ethical, socio-political	Expert critical reflection Level: deep personal, critical Paradigm: holistic Ways of knowing: integration, constructed personal, aesthetic, empirical, ethical, socio-political, unknowing
Skills Self-awareness, description, rule based, technical, rational, separation, reflection on experience, emotional intelligence, subjective, values and beliefs, evidence based empirical, identify change	Awareness of self & others, balance & connection, relational, openness multiple ways knowing, technical & humanistic, empirical and tacit knowledge, dialogic, reflection on & in experience, self-empowerment, emotional/spiritual intelligence. Perspective transformation	Whole, inter-connectedness/integration, individuation, evidence informed comprehension, reflection on & in & pre-experience, analysis, evaluation, synthesis, action, emancipation, spiritual intelligence, transformation
Knowing what Understanding Personal self-awareness Separation Cultural Assisted level two ⁴⁷	Knowing what & how Self-empowerment Open mindedness/judgement Connection/balance Ethical, cultural, social Supervised level four ⁴⁷	Knowing what, how & why? Knowledge & evidence Personal & professional Ethical, cultural, social & political Integration/connection/unity Independent level five ⁴⁷

Benner⁶³, van Mannen⁴⁵, Johns⁴⁴ Boyd and Fales.⁴⁷

3.2. Integrating and using the model within a midwifery program

The model can be used in a number of ways within the curriculum to support the scaffolded development of critical reflection and reflexivity leading to transformative learning.

3.2.1. Development of Reflective Thinking

Reflective thinking is used as a learning approach to enable to student to focus on the journey to ‘being’ and ‘becoming’ a midwife. Critical reflection fosters development of self-awareness and insight into how a person thinks and why they react to certain situations in a certain way. In this way critical reflective thinking becomes a lifelong process of self – development and support. By clarifying personal ethics and values the student develops both as a person and as a professional. Critical thinking skills are developed by asking why, how or what, and evaluating how this experience changes perspective. The model can be used to guide the development of reflective thinking within the structure of course work, assessment design, tutorial activity, group work and clinical practice.

3.2.2. Promoting and developing reflective writing

The model can be used to provide a framework to guide a student’s reflective writing in a number of ways across the curriculum. In our program students are commonly required to maintain a reflective journal. Journaling using the model as the construct framework enables the student to collect and collate a record of experiences, thoughts, questions, ideas and conclusions that will signpost the midwifery learning journey. Using the model to guide this specific style of writing enables the student to capture their experience in a holistic manner. By maintaining a reflective journal the skills required to develop a reflective and critical inquiring approach to midwifery are acquired. Journaling across the length of the program will also enable the student to sustain reflective practice and contribute to personal development throughout professional life as a midwife.

The model can also be used to guide reflective writing within formative and summative written assessment tasks. This is particularly useful when students are asked to reflect on clinical scenarios and present case studies. The structured approach enables the student to move beyond description and apply reflection on action creating transformative learning opportunities

3.2.3. Reflexive conversations

Using the model to create opportunities for reflexive conversations cultivates self-awareness, and promotes engagement with the whole self, enabling the students to deconstruct/reconstruct biases, beliefs, behaviour and practice.⁵¹ The model provides a framework to guide conversations between the student and preceptor/supervising midwife to identify learning goals and reflect on clinical practice. The model can also be used with peer group discussions and lecturer facilitated group work to explore learning from clinical practice, or to explore learning generated by reflection on and subsequent group discussion around theoretical course content within a flipped learning model.

3.2.4. Integrating midwifery theory & practice

The model provides a framework that can be used across different learning environments in different ways creating a holistic approach to the scaffolded development of reflective practice across the program. The application of the model across the theoretical and practical components of the program provides an opportunity for the students to clearly identify the links between theory and practice and subsequently apply theory to practice, as they become reflective practitioners.

3.2.5. Monitoring development of reflective practice

In order to monitor the individual student’s growth towards reflective practice the framework can be used to guide assessment through embedding key principles within a rubric that is weighted across the program. This ensures that each stage of the cycle is assessed in a holistic and integrative manner and students demonstrate development of skills over time. Each year of the program is also linked with a deeper level of critical reflection that informs and reflects the developing epistemology of midwifery practice that can be incorporated to assessment rubrics (see Table 3).

4. Conclusion

The Model of Holistic Reflection was designed to reflect the holistic nature of midwifery. In midwifery holism underpins the Philosophy of Midwifery^{52,53} and is embedded in the meaning of ‘midwife with woman’ emphasising the unique social and relational nature of midwifery care. Midwives need to balance

reflection and action, informed by self-awareness. Reflection as a learning process enables practitioners to bring to consciousness, scrutinise and develop their intuitive processes and develop their tacit knowing. This is very relevant to the development of midwifery knowledge and epistemology and emphasises the importance of midwives understanding the many forms of knowledge and valuing diverse ways of knowing. Reflection thus becomes a critical and reflexive process of self-inquiry and transformation of being and becoming ‘the midwife’ we each aspire to be. Central to this is the development of self-awareness cultivated through reflection in action. This approach is relevant to midwives as it reflects the diverse and complex nature of midwifery practice contexts and relationships. The development of students as critical reflective thinkers, equipped with self-directed and lifelong learning skills, was considered essential to effectively prepare for professional midwifery practice. Finally we anticipate the model will support the development of critically reflective and reflexive midwife practitioners who were able to not only ‘*think about what is, but also about what could be*’.⁵⁴

Currently the majority of professional knowledge occurs through the acquisition of technical rationality, with knowledge subsequently applied within the workplace to analyse and solve practice problems. This creates disconnection within work-based learning that does not take account of learners deciding how they participate and what is learned from their experience.⁵⁵ The model was designed to fill a void providing a framework to guide the development of reflective practice for midwifery students. Although primarily designed for use in an entry to practice midwifery program, the theoretical underpinnings and conceptual framework of the model are applicable across a wider spectrum of experience suggesting that the model could provide a valuable tool to guide continuing professional development and practice for registered midwives. The model may also be transferrable to other disciplines across the health and social care professions.

In order to explore the utility, acceptability by students and academics, the ability of the model to promote the development of reflective practice within midwifery students and transferability of the model to other disciplines a series of studies are currently underway. This includes a current study evaluating the impact of the Holistic Reflection Model as part of a longitudinal study across a three-year pre-registration Bachelor of Midwifery program. Therefore we will be able to report the impact on the development of critical reflection and reflexivity leading to deep personal and transformational learning.

Appendix A. Theoretical and conceptual framework underpinning Holistic Reflection

Theory/concept	Principles	Application
Philosophy	Phenomenology	Personal experience, consciousness, Ideology, hegemony, power, consciousness raising, challenge assumptions
	Critical theory ^{8,23}	
	Emancipatory ^{60,61,50}	Critical consciousness, emancipation
	Andragogy adult learner ⁴⁸	Self-directed, autonomous, motivated
Transformative learning	Holism, systems theory ¹²	Cognitive & affective learning
	Experiential learning ^{36,37}	Learning by doing, through & from experience
	Transformative education ⁵	Experiential learning, meaning making
Transformative learning	Transformative learning ⁷	Perspective transformation, habits of mind
	Holistic learning ⁴⁷	Intuitive, creative, writing, storytelling, art ⁵⁰
	Emancipatory learning ^{42,60,50}	Technical, practical, emancipatory

(Continued)

Theory/concept	Principles	Application
	Perspective transformation ⁷	Formative/restorative/transformational
	Individual/collective change ^{7,22}	Individual/social action, community
	Dialectic, dialogic	Reflexive conversation, storytelling, sharing
Ways of knowing	Multiple intelligence ^{31,59}	IQ, EQi, SQi,
	Multiple ways knowing	Value diverse forms of knowing
	Holistic paradigm ²⁹	Technocratic, humanistic, holistic
	Constructed knowing ³²	Connected & separate ways of knowing
Holistic reflection	Fundamental forms of knowing ^{33,40,41}	Personal, aesthetic, empirical, ethical ³⁴
	Unknowning ⁴⁰	socio-political ⁴¹
	Critical theory ⁸	Critique socio-political structures
	Social emancipatory model ⁹	Technical, empirical emancipatory
	Holistic approach ³⁵	Imagination; intuition, soul
	Integrate RbA, KiA, RiA & RoA ¹⁰	Reflect before, in & on experience
	Professional knowledge	Implicit, explicit, tacit knowledge, praxis
Professional artistry	Integrate/generate theory through practice	
Critical reflection		Structured, guided, rigorous, systematic, personal & societal, action ⁴⁴
	Reflexivity	Awareness self & others, mindfulness ⁴⁴ dialectical, relational, introspection
	Reflective practice	Integrate theory & connection feelings
Theory: practice fit		Integration midwifery theory & practice
	Novice to expert ⁶²	Novice practitioners tacit knowledge
	Levels of knowing ⁴⁵	Technical, theoretical to critical knowledge
Develop mental process	Depth & breadth	Deep personal, socio-political/cultural
	Mindfulness	Awareness self, others, internal/external
	Staged process	Technical rational/emancipatory general/specific, structured/unstructured
Holistic	Art & science midwifery practice	Theory & practice knowledge
	Holistic paradigm	Philosophy being with woman
	Holistic ways of knowing	Knowledge holistic/woman centred
	Holistic thinking	Whole brain/cognitive & affective
	Holistic philosophy	Whole person mind, body, soul connection
	Values based learning	Values & beliefs, self-exploration
Pedagogy of reflection		Structured guided reflection prompts
	Curriculum alignment	Participative, L&T strategies

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