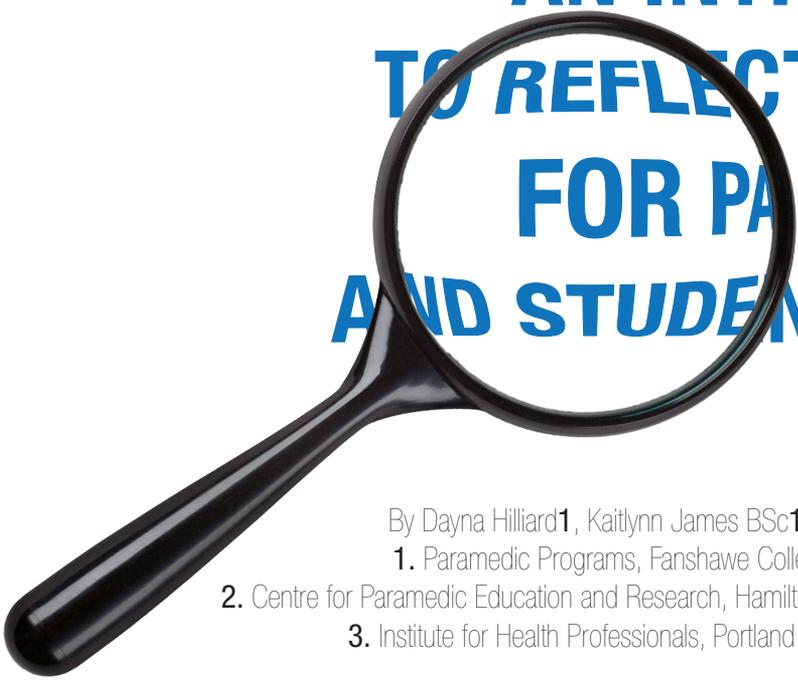


AN INTRODUCTION TO REFLECTIVE PRACTICE FOR PARAMEDICS AND STUDENT PARAMEDICS



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Reflective practice is an important tool in practice-based professional learning settings where individuals learn from their own professional experiences, rather than from formal teaching or knowledge transfer. It is an important process in continuous professional competency and development. Reflection is nothing to be scared of – we all reflect every day in different forms and about different things.

Learning to be a reflective practitioner includes not only acquiring knowledge and skills, but also the ability to establish a link between theory and practice, providing a rationale for actions. Reflective practice is the link between theory and practice and a powerful means of using theory to inform practice, thus promoting evidence based practice.(1) It can be used by both student paramedics and practicing paramedics to reflect on their strengths, weaknesses and potential areas for development.

Professional reflective practice may take the form of reflection-on-action or reflection-in-action.(2) Reflection-on-action encourages

practitioners to re-live past events in order to develop an action plan for similar events that may occur in the future. There is a tendency when one performs reflection on action to focus on the negative aspects of one's performance. Reflection-in-action encourages practitioners to observe and reflect on past situations from both their own perspective and those around them at the time of the event, which may aid in recognizing positive actions and behaviours.

Reflective practice

Reflective practice itself has many definitions:

- A process of learning and developing through examining our own practice, opening our practice to scrutiny by others, and studying texts from the wider sphere.(3)
- An approach to learning and practice development which is patient-centred and which acknowledges the untidiness and confusion of the practice environment.(4)

- An active process that enables health care professionals gain a deeper understanding of their experiences.(5)
- Reflection is being mindful of self, either within or after experience, as if a window through which the practitioner can view and focus self within the context of a particular experience, in order to confront, understand and move toward resolving contradiction between one's vision and actual practice.(6)

Reflective practice remains a relatively unknown concept in paramedic practice compared to other healthcare professions such as nursing, where it has been embraced as an essential foundation of professional practice and continuous development. Paramedic associations and regulatory bodies worldwide suggest that all paramedics maintain a personal continuing professional competency (CPC) or continuing professional development (CPD) portfolio; a reflective journal or diary is an essential part of this portfolio.

How many of you discuss calls and patient outcomes with other practitioners back at base

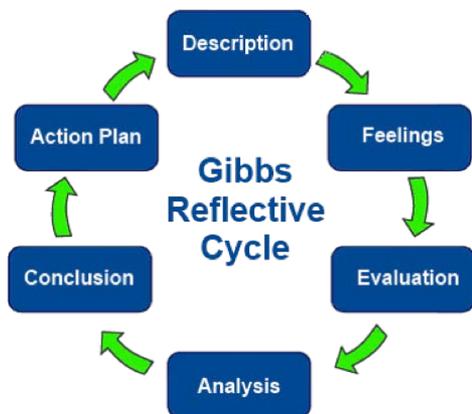
or in the ambulance? Hands up! Quite a few? As we thought – so reflection on practice is not a new concept to paramedics, but the formal application of it as part of professional development may be.

Reflective journals should not be seen as a laborious task required for CPC, and rather for an opportunity to critically reflect upon and develop one’s practice, as well as developing one’s critical thinking skills.(7) Students in other health disciplines such as medicine, nursing, pharmacy and allied health professionals find reflective journals a useful tool in the reflective process.(8–10)

Putting these reflections down on paper and in a logical, structured manner is what proves difficult to many practitioners. Many proposed paramedic-specific models of reflection have been put forward by various paramedic scholars worldwide, including the CRASHED model and the IFEAR model.(11,12) The Gibbs Reflective Cycle (13) is commonly used in nursing and other allied health professions, and the authors recommend this as an introductory reflective process for paramedics. It is comprised of a logical pathway for constructing reflective diary entries, and it emphasises the role of emotions and acknowledges their importance in the reflective process. This can be key to understanding one’s actions and the actions of others when performing reflection-in-action.

Gibbs Reflective Cycle

Gibbs Reflective Cycle is seen as one of the easiest to follow and implement, and is therefore a good starting point for those beginning with reflective practice.(13) Once you are comfortable with the reflective process, you may decide to use another reflective cycle that suits your needs better. Remember, reflection is a personal activity, and one model will not fit all needs – feel free to adapt cycles or processes to suit your individual needs. The main aim is writing down your reflection; this can be helpful in giving structure to your thoughts.(14)



Gibbs (1988)(13)

<p>Description</p> <p>A description of the call, simulation or incident, with relevant details. Remember to maintain patient confidentiality if you are reflecting on a clinical event. Don't make any judgement yet or try to draw conclusions; simply describe the events and the key players. Set the scene!</p>	<p>What happened? When did it happen? Where were you? Who was involved? What were you doing? What role did you play? What roles did others play? What was the result?</p>
<p>Feelings</p> <p>Don't move on to analyzing these yet, simply describe them.</p>	<p>How were you feeling at the beginning? What were you thinking at the time? How did the event make you feel? What did the words or actions of others make you think? How did this make you feel? How did you feel about the final outcome? What is the most important emotion or feeling you have about the incident? Why is this the most important feeling?</p>
<p>Evaluation</p>	<p>What was good about the event? What was bad? What was easy? What was difficult? What went well? What did you do well? What did others do well? Did you expect a different outcome? If so, why? What went wrong, or not as expected? Why? How did you contribute?</p>
<p>Analysis</p>	<p>What can you apply to this situation from your previous knowledge, studies or research? What recent evidence is in the literature surrounding this situation, if any? Which theories or bodies of knowledge are relevant to the situation – and in what ways? What broader issues arise from this event? What sense can you make of the situation? What was really going on? Were other people's experiences similar or different in important ways? What is the impact of different perspectives e.g. personal / patients / colleagues' perspectives?</p>
<p>Conclusion</p>	<p>How could you have made the situation better? How could others have made the situation better? What could you have done differently? What have you learned from this event?</p>
<p>Action Plan</p>	<p>What do you think overall about this situation? What conclusions can you draw? How do you justify these? With hindsight, would you do something differently next time and why? How can you use the lessons learned from this event in future? Can you apply these learnings to other events? What has this taught you about professional practice? Or about yourself? How will you use this experience to further improve your practice in the future?</p>



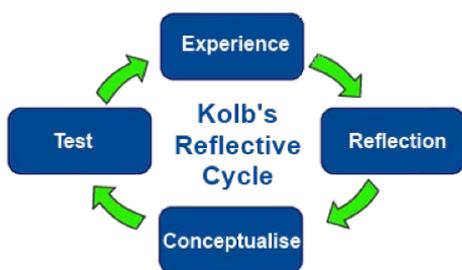
Once you are comfortable with the process of reflective practice, you will begin to focus on the evaluation, analysis and planning phases in more detail. Your reflections will likely become more insightful, probing and detailed as opposed to a generalised narrative description commonly seen when beginning reflective diaries. Some authors refer to achievement of this level as 'critical reflection'.

Gibb's Cycle is useful for reflecting on events such as clinical interactions and simulation scenarios; however, if you are looking to reflect on a learning experience (such as completing a course) then you may find Kolb's cycle more applicable.

Kolb's learning/reflective cycle

Kolb's learning/reflection cycle is a reflection of the learning styles that Kolb defines. (15) It consists of four stages – planning, doing, reflecting and linking. The key elements of the cycle are:

1. **Plan/Test** – here the learner's interest is captured, and the learning subject or material is established and learning objectives are identified.
2. **Do/Experience** – the student constructs knowledge on the subject by exploring through active learning methods such as questioning, observation and interacting.
3. **Reflect** – learners provide their explanation of the material that was covered.
4. **Link/Conceptualize** – applying the knowledge gained to various different situations and problems.



Kolb & Fry (1975)

Practitioners using Kolb's cycle self-analyze to determine if learning objectives have been met – this starts the cycle again at the plan/test phase. The cycle can however begin at any stage. For example, a learner reviews the learning content, and studies the material - this is beginning at the experience stage. The learner then reflects on what they have learned to if they can apply it practically to a number of exercises and problems. If not, then they must re-evaluate and start the cycle again. This can also occur based on a discontinuity – the learner may discover something they do not know, and therefore the cycle begins at the reflection phase.(16)

Reflection from the student's perspective

From the student's perspective, it is important that the process of reflection is incorporated into the curriculum before beginning preceptorship and ride-outs. As this is the transition period between student and professional paramedic, having a full repertoire of not only practical skills but critical thinking and academic skills also, is essential.

"There is a difference between knowing something and understanding something and reflective practice is a great way to make connections and understand concepts."

Prior to commencing ride-outs, students in the Fanshawe College Primary Care Paramedic Program are given background knowledge on how to apply a formal model of reflection and the potential benefits that are associated with the process of self-reflection. Additionally, it is reinforced that reflecting on performance is not to be labour-intensive or a chore, but instead an opportunity to learn and grow to one's full potential.

"Making the connections between theory and practical application through reflection really solidified concepts for me."

Generally, students focus on steps that they need to complete on each call such as

the primary survey and further patient assessment. Directives are learned, evidence-based practice is encouraged, and simulation scenarios are debriefed. These approaches are of course important, yet self-reflection post-call goes untouched. Students can get by in a classroom setting without having to take very much time to self-reflect, if at all. After being taught specifically about reflection and its benefits to the learning process it is obvious to us that reflection should be incorporated in the classroom before the student goes on the road.

"I am very grateful to have learned this concept early on and believe all paramedics and health care students should be encouraged to participate."

As students who are currently completing ride-outs keeping a reflective journal has become an integral part of the educational experience. Every single call is a learning experience yet it is hard to take away more than a few points while in the moment. To put it in perspective, from a student's point of view, every time the tones go off it is an adrenaline rush. All eyes are on the student as they go through the call. Students are trying to ensure the patient is confident in the care they are providing, while attempting to impress their preceptor. All while racing through mental directives, standards, and protocols.

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“So many things are running through my head about what needs to be accomplished that I forget I have people there to help me.”

Yes, major issues will be noted and addressed in the moment or in the immediate aftermath but minor improvements which could be addressed, how the student felt at the time, and ultimately how the situation could be improved are generally topics which arise during reflection.

“Calls can be so dynamic that I don’t have a chance to take it all in.”

Taking the time after the rush is over, the paperwork is submitted, and the call has been debriefed to quietly write down certain aspects of the call is extremely beneficial in both the short and long-term. Students have so much to learn from every call they attend. It is important to have an outlet to make note of the details, gather one’s thoughts, and think about what was great about the call and what could be improved for future encounters. Having the ability to reflect on a call and review how one handled it, interpret what occurred, critique the management of the call, analyze communication with the patient and determine what one did and did not like is a valuable skill.

Another useful step for students to include in reflective practice for paramedic students is

the initial differential diagnosis compared with the final working diagnosis, as well as how and why it changed or evolved. Using the reflective process to list initial differential diagnoses is also something that can be incorporated easily. This can allow reflection to aid in the development of improved situational awareness and improved critical thinking skills.(7)

“Becoming more aware of things I need to improve on is extremely helpful, especially as a student because I have time to make these changes and see the differences before entering the workforce.”

Additionally, acknowledging one’s feelings and personal thoughts is important as discussed earlier.(2) Reflection-in-action allows the opportunity for the student to explore how they really feel about different aspects of the event as well as their own performance throughout. Keeping reflection entries in a journal allows the student to look back whether it be days, months, or years down the road and use the lessons learned as encouragement to keep learning and improving throughout their paramedic career.

“Reflective practice is a great way to easily learn from yourself and consistently become a better medic.”

Ok...what next?

Reflection should be a never-ending process. Performed regularly, reflective practice will enable you to pay attention to the details of your clinical practice, and your ability to bridge the gap between theory and practice. Reflections will mature and develop over time, and this is a natural evolution in a practitioner’s reflective journey.

“My reflections are nowhere near where I aspire for them to be but I can already note improvements from my initial entries.”

Bearing this in mind, you will begin to anticipate upcoming situations as being new learning experiences and in doing so, become a more informed, safer and more skilful practitioner.

Disclaimer

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References

1. Tsingos C, Bosnic-Anticevich S, Smith L. Reflective practice and its implications for pharmacy education. *Am J Pharm Educ.* 2014;78(1).
2. Somerville D, Keeling J. A practical approach to promote reflective practice within nursing. *Nurs Times.* 2004;100(12):42–5.
3. Bolton G. Reflective Practice: An Introduction. In: *Reflective Practice: Writing and Professional Development.* 2010. p. 1–24.
4. Burns S, Bulman C. *Reflective Practice in Nursing: The Growth of the Professional Practitioner.* Oxford: Blackwell Publishing Ltd; 2000.

5. Conway J. *Nursing Expertise and Advanced Practice.* London: Quay Books; 1996.
6. Johns C. *Becoming a Reflective Practitioner.* Practitioner. 2004;3rd(February):286.
7. Brookfield S. *Developing Critical Thinkers: Challenging Adults To Explore Alternative Ways of Thinking and Acting.* Milton Keynes: Open University Press; 1987.
8. Constantinou M, Kuys SS. Physiotherapy students find guided journals useful to develop reflective thinking and practice during their first clinical placement: A qualitative study. *Physiotherapy.* 2013;99(1):49–55.
9. Koh YH, Wong ML, Lee JJ. Medical students’ reflective writing about a task-based learning experience on public health communication. *Med Teach.* 2014;36(2):121–9.
10. Asselin ME, Fain J a. Effect of reflective practice education on self-reflection, insight, and reflective thinking among experienced nurses: a pilot study. *J Nurses Prof Dev.* 2013;29(3):111–9.
11. Holland S, Todd J, Kinsella F. C.R.A.S.H.E.D – A model for structured reflection in prehospital care. *Ambu UK.* 2001;
12. Smart G. I.F.E.A.R reflection: an easy to use, adaptable template for Paramedics. *J Paramed Pract.* 2011;3(5):255–7.
13. Gibbs G. *Learning by Doing: A guide to teaching and learning methods.* Reflective Gibbs - Study Skills - Upgrade Study Advice Service - Oxford Brookes University. 1988. 129 p.
14. Price A. Encouraging reflection and critical thinking in practice. *Nurs Stand.* 2013;18(47):46–52.
15. Kolb DA, Fry R. *Toward an applied theory of experiential learning.* In: *Theories of Group Process.* 1975. p. 39.
16. Boyatzis RE. *Unleashing the Power of Self-Directed Learning.* In: *Changing the Way We Manage Change: The Consultants Speak.* 2002.

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