

Editorial

Reflection and Growing Minds

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In the unpredictable and dynamic health system, there is a growing need to incorporate reflection and reflective practice into all levels of medical education, as it is an essential tool for improving medical competencies. Reflective practice dates back to Socrates “the unexamined life is not worth living”. Dewey (1933)¹ defined reflection as "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends". Schon (1983)² described 'reflection in action' and 'reflection on action' for coping with the contextual complexities of practice. Kolb (1984) incorporated reflection as an essential step in his experiential learning cycle. Mezirow (1991)³ defined transformative learning based on critical reflection of 'disorienting dilemma'.

Fook, White and Gardner (2006)⁴ defined reflective practice as:

1. “A process (cognitive, emotional, experiential) of examining assumptions (of many different types and levels) embedded in action or experience.
2. A linking of these assumptions with many different origins (personal, emotional, social, cultural, historical, political).
3. A review and re-evaluation of these according to relevant (depending on context, purpose) criteria.
4. A reworking of concepts and practice based on this re-evaluation.”

Roth (1989)⁵ defined reflective practitioner as having 24 characteristics including ability to question and use inquiry for learning, having an open mind and

looking for alternative perspectives, testing assumptions and hypothesis, considering consequences, problem solving by analysis and evaluation and adapting to change.

Reflective practices are used to address issues from lifelong learning and professionalism to burnout and well being. Reflective practitioner has the capacity to engage in reflective learning. Reflective learning affects professional development (mindfulness), experience (therapeutic relation, psychotherapy), competence (expertise) and learning (lifelong, self regulated, growth mindset). Practical application of reflective learning includes experiential learning, problem solving, diagnostic decision making, critical incident analysis and deliberate practice.

There is a paradigmatic shift and nowadays, 'competence' and 'reflection' are linked together. Despite its importance, there is no unified approach to incorporate reflective learning in different educational settings. Our approach is to process reflection through 'growth mindset'.

Other authors introduced the idea of 'growth mindset'. Learners with growing minds consider ability and intelligence as dynamic and when faced with challenges, consider failure only as temporary setback and an opportunity to grow. Effort is considered essential and they use different strategies to reach their goals. Learners with fixed mindsets, however, attribute personal success to individual's ability and failure is considered as crisis. They either fail to recognize or act upon the given feedback.

Reflective practitioner characteristics of seeking to always develop, improve and truly open to learning

demands; all lead to 'growth mindset'.⁶

We advise following tips to incorporate 'growth mindset' in our learners.

1. Teaching learners that mind can change and grow.
2. Teaching learners how to do reflective practice (do, plan, review).
3. Praising the process of learning, rather than the grades obtained.
4. Teaching that effort is the key to success. Also when stuck, learners should try different strategies.
5. Teaching about deliberate practice and helping them focus on their weaknesses during the process.
6. Regular feedbacks which are focused and follow 'Pendleton rule of 4 steps'.
7. Developing communities of practice to focus on discussions for improvement and different strategies.

The key is to understand the present day needs and implement these practices. Failure to make changes will lead to students unable to adapt to demands of society.

References

1. Dewey J. *Essays and how we think* (revised ed). D.C. Heath: Boston; 1933.
2. Schon D. *The reflective practitioner*. San Francisco: Jossey-Bass 1983.
3. Paprock KE, Mezirow J. *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass (1991). *Adult Education Quarterly*. 1992; 42(3): 195-7.
4. Critical reflection: a review of contemporary literature and understandings. In: White S, Fook J, Gardner F, eds. *Critical reflection in health and social care*. United Kingdom: McGraw Hill education; 2006. pp.3-20.
5. Roth RA. Preparing the reflective practitioner: transforming the apprentice through the dialectic. *J Teach Educ*. 1989; 40(2):31-5.
6. Korstange R. Developing growth mindset through reflective writing. *J Stud Succ Ret*. 2016; 3(1):1-26.