COMMENTARY

A critical Exploration of Theoretical Frameworks for Reflective Learning: Reflections from a Faculty Development Workshop

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Abstract
Faculty training in reflective practice is essential, given the importance of this skill for health professionals. There are several reflective practice frameworks available; however, facilitators' experiences with these frameworks vary depending on the learning context (i.e. various types of teaching and learning activities). This commentary discusses the practicality of four reflective learning frameworks, i.e. Kolb's experiential learning framework, Gibbs' reflective cycle, Schön's reflective practice model, and the "What" model. Integrating the "What" model into the Gibbs' reflective cycle or Kolb's experiential learning framework is recommended to enhance learners' comprehension and application of the reflective process through a simple and practical approach.

Keywords Reflective writing · Reflective models · Faculty development · Reflective training

Introduction

Reflective practice is the ability to reflect on one's actions so as to engage in a process of continuous learning [1]. It involves self-examination through questioning and critique of a past experience [2]. The conscious thought process is essential for transformative learning, whereby the learner can gain more open perspectives that guide decision-making and actions for future experiences [3]. Reflective practice is an important skill for healthcare professionals as it helps bridge the gap between theory and practice. Reflection enables learners to display insight by identifying actions that facilitate learning, development, or improvement of practice, leading to greater insight and self-awareness and discovering opportunities to enhance quality and patient safety in organisations [4]. It promotes critical thinking, problem-solving, self-directed and lifelong learning, communication, and collaboration skills, leading to improved clinical decision-making capabilities [5–7].

The Centre for Education at the International Medical University organises and conducts faculty development activities in accordance with the eight roles of the medical teacher [8]. These roles are as follows: (1) information provider and guide; (2) role model as teacher and practitioner; (3) facilitator and mentor, (4) assessor; (5) curriculum developer and evaluator; (6) manager and change agent; (7) scholar and researcher; (8) professional and enquirer into own competence. To enhance the faculty's skills in reflective practice and as well as their competency in guiding students' reflective writing, a faculty training workshop on reflective learning was conducted in alignment with roles 3, 4, and 8 of the medical teacher. The workshop comprised three facilitators and ten participants, who were physicians or non-physicians from multi-disciplinary backgrounds (clinical skills and simulation, community medicine and public health, pathology, pharmacology, psychology, pharmacy, nutrition and dietetics, and veterinary medicine) involved in the delivery of teaching and learning activities in health professions programmes. During the workshop, the Kolb's experiential learning framework [9], Gibbs' reflective cycle [10], Schön's reflective practice model [11], and the "What" model [12, 13] were introduced as the conceptual frameworks for reflective

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practice. These four models were chosen for the workshop as they were commonly used for guiding reflective writing that is aligned with the workshop participants' experience.

Reflection occurs typically during experiential learning activities. Kolb's experiential learning theory [9] defines the four stages of an experiential learning activity as concrete learning; reflective observation; abstract conceptualisation; and active experimentation. It promotes learning through reflection, hence strengthening the learning experience by enabling them to apply the learning in real-world situations. The Gibbs' reflective cycle [10] provides a framework for examining the experience and guiding reflection in six stages, i.e. (1) description of the experience; (2) feelings and thoughts about the experience; (3) evaluation of the experience; (4) analysis to make sense of the situation; (5) conclusion about what has been learned and what could have done differently; (6) action plan for how one would deal with similar situations in the future, or general changes that one might find appropriate. It compels the learner to engage critically with the learning experience and hence encourages the depth of reflection. Schön's framework integrates reflection in action and reflection on action, which occurs during and after the learning event, respectively [10]. The former requires one to think and act at the time of the experience, while the latter enables one to process the new information and feelings during the experience and think about how it can be handled differently should the event occur again. Meanwhile, the "What" model provides a practical lead to the reflection process by getting the learners to answer three key questions: What? So what? Now what? [12, 13].

While robust reflective models are available, many faculty members encounter significant challenges in selecting and effectively utilising them. For example, the limitations of Kolb's experiential learning model have been highlighted, as it primarily focuses on applying and linking concepts to experiences but lacks emphasis on problem-solving [14]. In response, a new integrated model combining Kolb's framework with general problem-solving steps was proposed to enhance both problem identification and solution execution. During our workshop, the participants identified another concern, i.e. the lack of a structured guiding process within the models. Consequently, they engaged in discussions to select an appropriate reflective learning framework for guiding learners' reflective writing. The consideration factors included learners' proficiency in reflective practice and their understanding of the purpose of reflective writing (why), content assessed (what), assessment criteria (how), and individuals responsible for assessing reflective writing (who). Echoing the challenges identified by Chng [14], the workshop participants highlighted complexities in application and potential variations in marking criteria for reflective writing using existing frameworks. These shared experiences reflect a common struggle among educators. Consequently,

our manuscript seeks to address these challenges by proposing a refined reflective practice approach tailored to learners and educators. By advancing the discourse on reflective learning and fostering a more effective framework, we aim to empower faculty members and enhance the reflective learning experience for all stakeholders.

Challenges in Teaching Reflective Writing

As shared by the workshop participants, teaching reflective writing can be challenging, given that it entails providing guidance to individuals as they delve into and express their own thoughts, emotions, and experiences. The lack of prior experience with reflective writing among participants may pose a challenge in comprehending the procedure and its associated expectations. In many cases, the disclosure of personal experiences and vulnerabilities by participants may elicit discomfort, thereby impeding their active involvement in the reflective process. In addition, participants may find reflective writing challenging due to the necessity of self-analysis and critical thinking, especially if they have not received previous training in this area. Lack of depth in reflection in the absence of a mapping process can hinder deep learning. The teaching process can be further complicated by the diverse learning styles of the participants, necessitating a flexible approach to accommodate individual preferences. Emotional intensity presents an additional obstacle, as reflection regarding difficult or unpleasant events may elicit intense emotions that necessitate cautious handling. Additionally, time limitations and the labour-intensive reflective writing process may impede active participation. Facilitators may find it challenging to deliver actionable feedback on reflective writing; nevertheless, accomplishing thereby is crucial for the continued growth of the participants. Similar challenges have been reported in the literatures [15–17]. Several studies have found that the quality of students' reflections is influenced by the models of reflection used [18, 19]. Hence, the facilitator's guidance is crucial, as inadequate or ambiguous instructions may cause participants to feel confused or produce superficial reflections.

Selecting the Appropriate Reflective Learning Model to Guide Learners' Reflective Writing

The workshop participants discussed their experience using the four well-established reflective frameworks to guide reflective writing. These are presented in Table 1.

Both Kolb's experiential learning and Gibbs' reflective cycle are holistic and comprehensive frameworks that guide the learner through a systematic reflection method. However,

Table 1 Workshop participants' experience using Gibb's reflective cycle, Kolb's experiential learning, Schön's reflective practice, and the "What" models

Reflective framework	Strengths of framework	Challenges
Gibbs' reflective cycle	• Offers comprehensive and structured approach to reflection • Encourages in-depth analysis which promotes critical thinking • Useful for experiential learning activities	• Can be challenging for beginners to differentiate the different stages in the cycle when preparing the reflective writing (e.g. analysis *versus* evaluation, conclusion *versus* action plans) • May hinder the learners' psychological safety in revealing their opinions if the reflective process becomes excessively prescriptive
Kolb's experiential learning model	• Holistic and action-oriented approach that allows application in practical situations • Suitable for workplace-based activities over a period of time, e.g. industry placement/internship • The active experimentation phase encourages self-awareness and develops work competencies	• Learners may find difficulty in grasping the concepts in each phase • Can be challenging for facilitators in guiding learners via appropriate questions as the nature of the experiential learning activities could be diverse and complex
Schön's reflective practice model	• Addresses real-time decision-making and post-action analysis • Offers adaptability and allows quick decision-making • Useful for task-based activities	• Lack of structured approach to guide reflection
The "What" model	• Straightforward and easy to implement • Suitable for beginners and sessions that require quick reflection	• Not for in-depth exploration of complex experiences that involve multi-dimensional factors, e.g. learning environment and learners' behaviour

the task of translating these phases into practical actions may prove difficult, leaving both novice instructors and learners uncertain of what to do during each stage. Given the fact that Schön's reflective practice model is more applicable to specific contexts, selecting this as a "standard" framework for all teaching and learning activities may not be the most effective approach. The "What" model is characterised by its simplicity and straightforwardness, facilitating learners' comprehension and application. However, unlike Gibbs' and

Kolb's models, it does not explore multiple dimensions or phases of reflection, and thereby can be lacking in depth and complexity of reflection.

Our discussion inspired creativity in combining two frameworks that compensate for one another's limitations while maximising the strengths and efficacy of each framework. It is recommended to integrate the "What" model into either Gibbs' or Kolb's framework, as shown in Figs. 1 and 2, respectively.
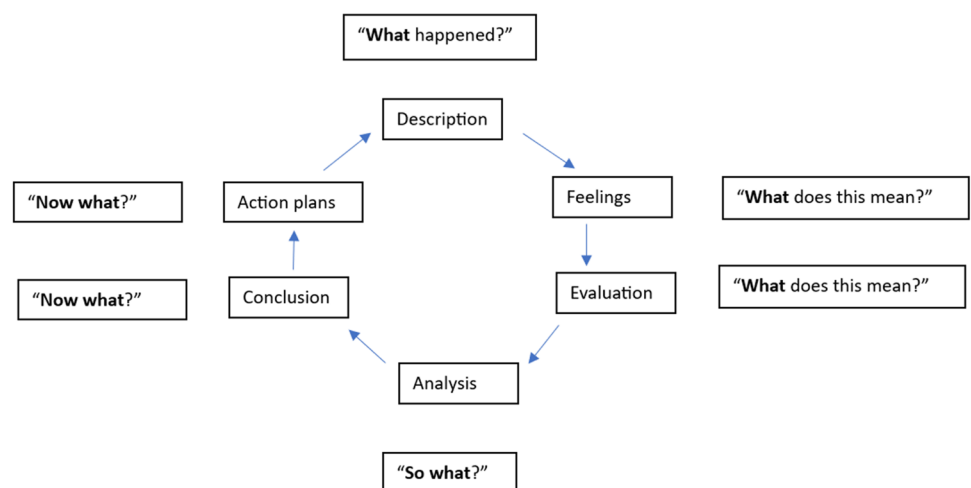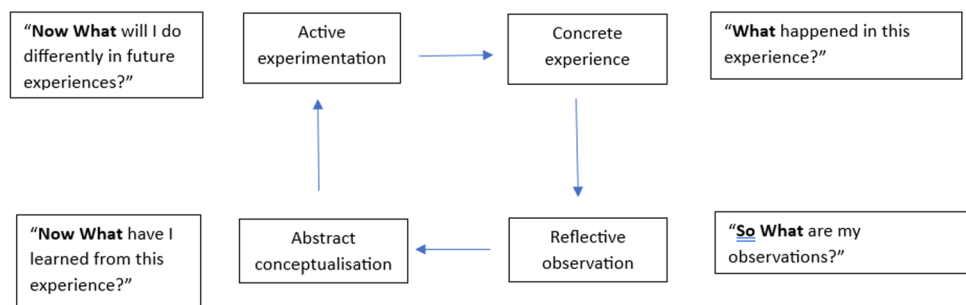

Fig. 1 Incorporating the "What" model into Gibb's reflective cycle

Fig. 2 Incorporating the "What" model into Kolb's experiential learning model

Incorporating the "What" Model into Gibbs' Reflective Cycle

At the "Description" phase: Ask "What happened?" This helps to lay the foundation for a clear and factual account of the experience.

At the "Feelings" and "Evaluation" phases: Prompt "What does this mean?" This helps learners to link the experience to their thoughts and emotions.

At the "Analysis" phase: Ask "So what are the consequences and implications?" This triggers the learners to critically analyse the outcomes of the experience.

At the "Conclusion" and "Action Plan" phases: Ask "Now what have I learned and will I do differently?" This guides the learners to formulate a concrete improvement plan based on their analysis.

Incorporating the "What" Model into Kolb's Experiential Learning Model

At the "Concrete Experience" phase: Ask "What happened in this experience?" This facilitates the establishment of a concise and objective narrative of the experience.

At the "Reflective observation" phase: Ask "So what are my observations?" This prompts learners to critically evaluate the outcomes of the experience.

At the "Abstract conceptualisation" phase: Ask "Now what have I learned from this experience?" This facilitates learners in drawing conclusions and acquiring insights from the experience.

At the "Active experimentation" phase: Ask "Now what will I do differently in future experiences?" This facilitates learners in strategising and implementing what they have learned.

Conclusion

The key to teaching reflective writing skills is to provide guidance for the learners using easily applicable models, focusing on clear instructions and step-by-step procedures.

By integrating the "What" model into the Gibbs' reflective cycle or Kolb's experiential learning framework, as discussed in this commentary, a balance can be achieved between simplicity and depth of reflection. This can enhance the learners' ability to comprehend and apply the reflective process, hence promoting personal and professional growth. However, further research is needed to assess its limitations and effectiveness. Further inquiry into its application across disciplines and contexts, as well as exploration of individual and cultural influences, is necessary to advance our understanding and refinement of reflective practice using this combined reflective model. Through collaborative efforts, we can empower learners and educators in the pursuit of reflective excellence.

Declarations

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