This document is a best practices essay from the international, multidisciplinary collection of teaching and training techniques, “Critical thinking and Clinical Reasoning in the Health Sciences.” Each essay in this set provides an example of training reasoning skills and thinking mindset described by international experts in training clinical reasoning.

Keeping a Journal of Reflections on Learning

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In this chapter Dr. Chur-Hansen talks eloquently about a portfolio journal exercise she includes as a mechanism of course evaluation and learning assessment in the courses she teaches to health science students at the University of Adelaide. Here the term ‘portfolio’ is used to refer to a formative self-evaluation tool that encourages reflective evaluation of learning from the student’s perspective. (Other uses of the term refer to the collection of a ‘showcase portfolio’ where students collect only their best work and use it for job placement, or ‘assessment portfolios’ where an objective sampling of student work products are collected for the purpose of curriculum or program level assessment).

This thoughtful exercise emphasizes the practice of analysis, inference, and evaluation. It also calls upon students to be fair-minded in their critique, training the critical thinking dispositions of truth-seeking and open-mindedness. Reflective journaling is used with careful guidance to developing the important skill of metacognitive reflection summed up by one of the journaling directions: “Consider why you think so.” This habit of mind is at the heart of competent clinical reasoning at every level of expertise. Other helpful theoretical and research papers by Dr. Chur-Hansen are included in the reference list at the end of the chapter.

Background and Context

It is widely accepted that knowledge about health should be based on interdisciplinary collaboration. There are several reasons for this: first, health care providers work in teams; second, both the aetiology and treatment of many conditions, including high prevalence chronic illnesses such as diabetes and hypertension are becoming increasingly
multimodal; third, it is well recognised that holistic approaches to health and health care are desirable over the reductionist approaches of the recent past; and fourth, an interdisciplinary approach to medical and psychological research is now encouraged - perhaps expected - by institutions and granting bodies.

Medical, psychology and health sciences students learn together in two courses offered at the University of Adelaide, the first year course of “Person, Culture and Medicine” (referred to hereafter as PCM), and the second year course that follows, “Emotion, Culture and Medicine” (ECM). In these courses the topics of food and eating, sex and relationships, pain and death, and human emotional states in health and illness are examined from psychological, cultural and physical anthropological and neurobiological perspectives. Representatives from each discipline contribute to teaching sessions. The pedagogical underpinning of this approach is that health issues are best understood by combining knowledge from different disciplines. For this to occur, people from these seemingly disparate disciplines must work together with understanding and respect. To the best of my knowledge this course is unique in its aims, these being: the facilitation of interdisciplinary approaches to a number of aspects of human variation as they occur throughout the life-cycle; an appreciation that psychology, cultural anthropology, physical anthropology and neurobiology are complementary disciplines, and that sometimes they intersect; and an understanding of the complexity of and variation in human responses to major life events.

Rationale behind the journal
There is a strong movement in the health professions, and particularly in nursing and in medicine, towards fostering “reflective practice” (Schon, 1987). There is also a movement, again primarily in medicine, toward the use of portfolios for teaching and learning. Both of these approaches are extremely valuable for life-long learning and the facilitation of critical thinking. Thus, students in PCM and ECM are required to maintain a reflective portfolio – in other words, a journal, or diary – of their thoughts and experiences in relation to their studies. They are encouraged to make links to their wider learning experiences at university. As partners in the teaching and learning process, the portfolio is one vehicle for them to express their satisfaction or constructive criticisms about the course.

Learning objectives of the exercise
Based on the rationale of the reflective portfolio, it aims to achieve the following learning objectives:

(a) Introduction to the concept of maintaining a journal in which thoughts about teaching and learning experiences in class are recorded.

(b) Development of critical reflection skills about the course and one’s own abilities, including strengths and weaknesses in relation to course requirements, and course aims and objectives.

(c) Development of evaluative reasoning skills in providing constructive criticism to the course coordinator through writing in the journal.

(d) An understanding that this exercise and these skills may be useful outside the class context – for example, in other courses, in other professional arenas.

In working toward the achievement of objectives ‘b’ and ‘c’ the emphasis is on practice the critical thinking skills of analysis, inference and evaluation. I also expect a fair-minded and constructive approach to the critical reflection and evaluative critique of the course.

What is expected from class participants?
In the medical education literature there are many examples of “failures” when using journals and portfolios. Driessen and colleagues (2005) have outlined the conditions under which portfolios are most likely to succeed in helping
students to learn. These conditions, which have been followed in PCM and ECM, are (1) the provision of formative feedback; (2) the provision of clear guidelines; (3) latitude for the student to write freely if they wish; (4) exposure to experiences worth writing about; and (5) the award of a pass or fail grade. I use all of these suggestions in the design of this portfolio exercise.

**Instructions for the Journal Exercise**

- There must be a minimum of 12 entries in the journal in order to achieve a satisfactory grade (one for each class). There is no maximum limit of entries, nor is there a minimum or maximum length requirement.
- The portfolio can be presented in any way you wish – written in an exercise book, or typed onto separate, stapled sheets.
- Each entry must be dated.
  - You can reflect upon your experience in the course in any ways you feel are appropriate. Typical entries may revolve around what you are learning, looking back upon it, thinking through plans for assessment tasks, considering where your knowledge is lacking, reflecting upon emotional reactions to material in the course, the ways in which you are being taught, how you feel about your learning experiences and so on.
  - You may also like to think through whether the course is achieving its stated aims and objectives. For example, have some of your ideas and beliefs been challenged? How do you feel about that? Do you think it is useful to learn alongside students from other disciplines or not? Consider why you think so.
- In assessing portfolios, higher grades will be awarded to students who show an ability to reflect in an open and honest way that fosters insight into their learning. Credit will be given for students who show development over the period of the portfolio.
- Some things are not appropriate for portfolios, for example: personally insulting remarks about classmates or teachers, and sexist or racist reflections.
- However, negative feelings, criticisms about the teaching or the course, disappointment about the experience and so on are acceptable and indeed, can be powerful in helping you to achieve an insight into yourself and how you deal with such things. For example, think through why you feel unhappy, and what you might be able to do to constructively manage the issue. If you are not sure how to word such reflections, Dr Chur-Hansen will help you with this during a formative feedback session.

**Figure 1**

At the Orientation Class (the very first class meeting) students are advised that part of the assessment requirement for the course will involve keeping a reflective portfolio, which contributes 10% toward the final, summative grade. The rationale behind asking students to maintain a reflective journal, and what is expected, is discussed. In explaining the purpose of the portfolio, students hear about the literature’s evidence for the value of reflection in learning and in clinical practice. They also learn that reflection is a skill, and needs to be worked upon throughout the course and beyond. Figure 1 displays the instructions I give to students for this exercise.

Students are required to receive formative feedback at least once (but as many times as they wish) on their portfolio. This is important, since for almost all students in the courses it is the first time that they have been asked to keep a reflective journal. For most, it is the first time that they have been asked to step away from learning factual material, and to instead consider the process of learning itself. It is also the first time they may have been asked to take some responsibility for the provision of formative feedback to their teachers, as adult learners. These are sophisticated expectations that require guidance.

In addition to adding metacognitive reflection about their learning process, this journaling exercise requests that they use critical thinking skills to produce their journal entries: analyzing exactly what they see as evidence of learning; explaining how they interpret the learning experience; analyzing their emotional responses to course content; drawing
inferences as to the appropriateness of these responses; comparing expected learning goals and objectives with actual learning outcomes; interpreting and evaluating the instructor’s teaching methods. All of these call for the practice of critical thinking skills.

Evaluating the Portfolios

You can see that I have provided to the students my evaluation criteria embedded in Figure 1. Figure 2 pulls these out for easier consideration. The guidelines communicate to students that I value open and honest reflection that fosters insight into their learning and growth in the skills of critical reflection over time. I encourage a thoughtful critique of the course in terms of the learning experiences they are having, and offer to help them develop the critique skills needed for a thoughtful discussion of how they are measuring progress toward and barriers to learning. I also make it clear that fair-minded analysis and evaluation is what is needed, and not ad hominem arguments or groundless prejudicial attacks.

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<thead>
<tr>
<th>Criteria for Evaluating the Portfolios</th>
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<tr>
<td>12 dated journal entries at minimum</td>
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<td>Reflections on many of the following:</td>
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<td>- Feelings and emotional reactions: to course content, analysing their meaning and appropriateness</td>
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<td>- Learning in the course and continuing knowledge gaps</td>
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<td>- The accomplishment of class assessment tasks</td>
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<td>- Observations their response to varying teaching modalities</td>
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<td>- Reflections of the achievement of the courses’ stated aims and objectives</td>
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<td>- Reflections on the experience of having ideas and beliefs challenged</td>
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<td>- Reflections on being taught in a multidisciplinary learning environment</td>
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Figure 2

Student responses and feedback

The portfolios are a challenge to students. The medical students in the class have a basic familiarity with the concept, but the portfolios they keep for their medical studies are concerned with their reflections around interactions with patients and clinical questions. They do not reflect on a deep level about their own learning and learning processes. For the psychology and health sciences students, the concept of a portfolio that documents their thoughts and emotional reactions is quite alien. The portfolio for PCM and ECM is solely concerned with reflections about learning and teaching matters. None of the students have ever had to think about the ways in which they are learning new material, how material links with prior knowledge, how the delivery of the course helps or hampers their individual learning styles and needs, or to put themselves in the shoes of their teacher – that is, what they think about the educational approaches being used and the material presented.

For those who master the skill of reflection about their own learning process the benefit is immediate and lasting. However, the portfolio has not always facilitated student learning. There is a tendency for some students to simply summarize the class content, rather than demonstrate true critical reflection, upon which assessment of the portfolio is based. These students become frustrated, seeing the exercise as a waste of time. Most, however, enjoy the exercise and learn a great deal from it. To encourage engagement in this task in future PCM and ECM classes I intend to provide students with examples of thoughtful, reflective portfolio entries, something that I have not yet done.
The portfolio has definitely been an invaluable insight for me into students’ thoughts and needs. It has most definitely helped me to understand why difficulties in learning arise, and gives me ideas on how to address these. Because I see the portfolio during formative feedback sessions, I am able to act on concerns during the course, not simply wait until the next group of students has commenced the year.

The following are excerpts from students’ journals, illustrating the benefits for them:

“It took me a while to get into this reflective journal, as I wasn’t entirely sure it would be a useful exercise, however after a few weeks I started to enjoy writing about particular topics and discussions that I had found the most interesting. Often it was only passing comments or brief stories or explanations that caught my attention and interest, and it was good to be able to expand and reflect on those issues in this journal after the class” (PCM Year 1)

“I’ve been finding the journal a really useful tool to nut out my ideas for the essays, and relate the questions to what we learn in class – but without even consciously meaning to. In PCM I was a bit reserved about the journal at first, and was skeptical about how effective it would really be in assisting me with my learning, but I have no doubts now. It’s a shame that they don’t make us do this in any of our other courses” (ECM Year 2)

“I realise that I am one of those students who does not participate in discussions within the class. The reason why, I believe, is because I feel like most of the other students in the class . . . are more comfortable, knowledgeable and opinionated concerning the subjects in this course than I am. Writing this, I have just had a realisation – the purpose of this portfolio is to force us to bring things like this to our own attention. I will try and work on my participation from now on.” (ECM Year 2)

References


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