The Reflection Competency: Using Narrative in Remediation

14

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Abstract

Reflection is critical to experiential, lifelong, self-directed learning. The practice of medicine is characterized by complexity, uncertainty, emotional intensity, values conflicts, and ethical challenges. It has been proposed that the capacity to reflect masterfully is required to work effectively in such complex settings. Many physicians eventually master this capacity, most struggle somewhere along the way, and some manifest significant trouble reflecting accurately and efficiently enough to achieve clinical competence. In this chapter, the author reviews conceptual models highlighting the critical nature of reflection and demonstrates through case examples that reflective capacity can be enhanced through structured writing exercises. While narrative exercises have value for most physicians, students who will benefit most from a narrative-based remediation strategy are those who lack insight into their own problems and deficits, especially those who are insensitive to the perspectives of others and or who hold unexamined biases and attitudes that negatively impact clinical competence.

"By three methods we may learn wisdom: first, by reflection, which is noblest; second, by imitation, which is easiest; and third, by experience, which is the most bitter."

—Confucius

"We don't see things as they are, we see things as we are."

—Anais Nin

"All there is to thinking," he said, "is seeing something noticeable which makes you see something that you weren't noticing, which makes you see something that isn't even visible."

—Norman MacLean, "A River Runs Through It"

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14.1 Introduction

Medical education historically has emphasized facts and the latest scientific knowledge; it has been oriented toward achievement, action, and outcomes to the exclusion of other relevant domains of learning and ways of knowing. Nowhere else is this more manifest than in the course work required prior to medical school applications. The set of admissions expectations creates a path to becoming a physician and pressures students to abandon exploring fields of study unless they are directly related to the goal of becoming a doctor. This emphasis, as well as many other powerful forces impacting medical education, has led to a culture of "unreflective doing" in medical education, resulting in a underdeveloped capacity to learn by reflecting on practice.

As it has become clear that mastering foundational medical knowledge is necessary but not sufficient to being a competent physician, there have been renewed calls for reform in medical education [1]. For the past decade, accreditation leaders such as the Accreditation Council on Graduate Medical Education (ACGME) have set expectations that reach beyond medical knowledge [2]. There are initiatives to incorporate behavioral and social sciences into medical school [3], and premedical requirements and admission processes are broadening for the first time in decades [4–6]. Beyond suggesting additional content, the landmark Carnegie Foundation report proposes that there be explicit focus on the processes of integration of knowledge and experience, habits of inquiry, and improvement to promote excellence, identity formation, and the process of developing and refining professional values [1]. All of these efforts require individual physicians to master a set of cognitive abilities that enable lifelong, self-directed learning. The capacity to reflect before, during, and after practice is foundational to this emerging area of competence [7]. Yet the medical education literature suggests these skills are underdeveloped in learners and faculty [8].

Reflection:

"a metacognitive process that occurs before, during, and after situations with the purpose of developing greater understanding of both the self and the situation, so that future encounters with the situation are informed from previous encounters." [7]

14.2 Reflection as an Area of Competency

Reflection is particularly important in making a successful transition from the classroom to the clinical setting as students move from a student-focused setting to a patient-focused, experiential learning environment [9]. Thus, the call for reflection stems in part from the recognition that in professional practice there is a divide between the "high hard ground," where problems are solved through the application of research-based theory, and the more "messy" real world, where complex problems defy clear technical solutions. In these indeterminate zones of practice, where general rules do not result in solutions, where problems are characterized by their uncertainty, uniqueness, and values conflict, technically rational evidence-based solutions often cannot be found [10].

Recent literature traces the decline of empathy during medical school [11, 12]. Some attribute this to the conflicts between espoused values and the values in practice found in the "hidden curriculum" [13, 14]. The hidden curriculum will continue to exert significant influence on students' professional development unless we find ways to prepare students to recognize and critically consider the challenges such informal messages promote as they develop their own professional habits of mind.

To reiterate, experience alone is insufficient to guarantee learning. Reflection—critically considering what you are doing before, during, and after doing it—is necessary in order to promote learning. Reflection is foundational to self-directed

learning: it is necessary for self-assessment, eliciting and responding to feedback, reconciling feedback with one's own self-assessment, and then incorporating self and peer assessment into subsequent performance [15, 16].

14.3 Frameworks for Understanding the Reflection Competency

14.3.1 The Reflective Practitioner

The complex challenges experienced in medicine—dealing with death, patients with challenging personality types, multiple organ system failure in the intensive care unit, multiple chronic medical problems in clinic, or patients who don't adhere to their prescribed medications—defy simple solutions. Helping medical trainees learn from real-world settings requires a framework for choosing an effective action in a complex context. Donald Schon's model of the reflective practitioner has provided such a framework. He defines skills that we can apply automatically, almost by rote: "knowing in action" — those skills that we can apply and refine at the same time that they are being put into practice as skills requiring "reflection in action," and those skills that require that we think and process an experience after the initial encounter as requiring "reflection-on-action" [10]. In refining this model, others have acknowledged that we sometimes anticipate what we are about to do and prepare for it, an act discussed as "reflection-for-action." (See Chap. 13 for more detail on reflection as a metacognitive tool.)

14.3.2 Kolb's Cycle of Experiential Learning

As students move from the classroom to the workplace, they must be prepared to engage predominantly in experiential learning. This necessitates that students develop the capacity to effectively and efficiently derive lessons from concrete clinical experiences and then apply their learning to subsequent encounters refining their own skills in the process [9, 17]. Consider a third-year student on the first day of the Neurology clerkship. He observes, along with other students, as the four residents and one attending make rounds on 23 patients. The entire session lasts about 90 min. Each patient is examined and discussed very briefly. The student notices that the most common diagnoses are stroke, seizure, brain tumor, and psychological factors contributing to neurologic symptoms. Seven of these patients initially presented with hemiparesis. What and how does the student learn from this concrete experience? The potential is great. Students often describe this as "drinking from a fire hose." But because of the overwhelming breadth of material available, most inexperienced students learn very little because they are not prepared to learn in this way. With a well-honed and disciplined approach the students could learn how to distinguish a "basic" neurologic exam from a series of special maneuvers applied in unique contexts based on the disease process either known or suspected. Students with well-developed critical reflection skills will be certain to walk away with specific reading goals. For instance, the student could be sure to spend 1 h that evening reading about the key features that differentiate among the underlying causes of hemiparesis. By actively reflecting on what they do and do not understand, they can maximize their own learning from concrete experiences. Figure 14.1 illustrates how this cycle works in clinical situations.

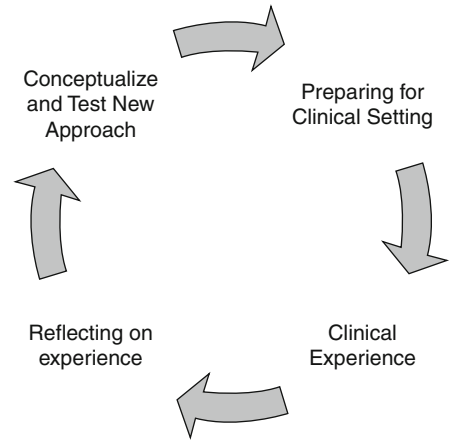

Fig. 14.1 Kolb's Learning Cycle adapted by Greenberg and Blatt for clinical experiences

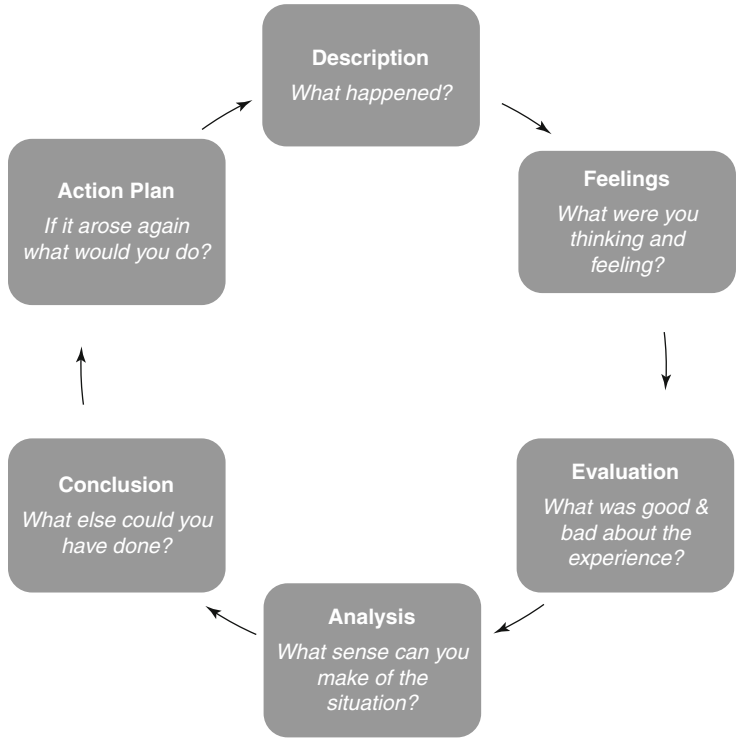

Fig. 14.2 Gibbs' Reflective Cycle provides prompts to faciliate a step-wise approach to analyzing or debriefing concrete experience. Adapted from Gibbs [24]. Reproduced with permission of the author

14.3.3 Gibbs' Reflective Cycle: Learning to "Pay Attention" to Concrete Experiences

Many students transition from classroom to clinical setting fairly easily. Yet, beginning students encounter many challenging situations when they first enter the clinical years [18–20]. They see dramatic and complex surgery, they see their first patients die, and they witness several cardiopulmonary resuscitations. They see vivid, dramatic, and shocking things that are often hard to digest emotionally [21].

> I have seen entirely too many people naked. I have seen 350 pounds of flesh, dead: dried red blood streaked across nude adipose, gauze, and useless EKG paper strips. I have met someone for the second time and seen them anesthetized, splayed, and filleted across an OR table within 10 min [22].

Paying attention during the concrete experience, allowing for reflective observation can be challenging in these circumstances. Two of many ways to promote this ability to reflect include mindfulness training and participating in Balint groups [16, 21, 23]. Gibbs' Reflective Cycle (see Fig. 14.2) gives structure and suggests a series of prompts to help facilitate trainees' reflective observation skills. Individuals using this cycle can compare their own observation to those of peers, their teachers or the literature [24]. This strategy promotes critical reflection skills [25], as defined by Brookfield.

14.4 Narrative in Medical Education: Deepening Learning and Abstract Conceptualization

Stories have a central place in medicine. We all have spent many hours telling each other about the interesting case, the diagnostic dilemma, the new presentation of an old disease, the new

disease. These stories are told in many different venues—in the hallways, over a late night snack, or in more formal settings. The role of writing stories in educating all physicians is not yet clear; however, such stories clearly serve an essential means of expression *for many physicians,* judging from the submissions to journals that publish reflective writing and the long tradition of books of patient stories by physicians [26]. The relationship between reflection and storytelling has been described in the medical literature [27–30].

Writing narratives favors depth over breadth of understanding a phenomenon [31]. Therefore, it makes sense that writing would be a useful strategy to move from raw reflections made on a concrete experience toward formulating the abstract conceptualizations needed to drive cycles of continually improving performance, as theorized by Kolb. There are a few intriguing outcome studies in this domain. Writing about stressful experiences boosts immune response to Hepatitis B vaccination in New Zealand medical students [32], improves lung function in patients with asthma, reduces disease activity in patients with rheumatoid arthritis [33], and has other benefits beyond the medical setting [34]. One outcome study demonstrated that a program that had interns write narratives was an emotional outlet for interns and led to greater personal awareness [35]. Those who teach reflective writing have proposed that it prompts learners to develop their unique voice in the life world of medicine. They assert that reading and listening to such reflective writing prepares students for the risk taking and vulnerability inherent in clinical practice and promotes professional development, general well-being, and empathy [36]. This has broad applications, including the promotion of cultural competence and fostering professionalism and professional development [37, 38] (see also Chaps. 7 and 8).

Yet those who publish narratives choose to write. The focus of the rest of this chapter is on the use of narrative as a method to enhance reflection in remediation of physicians and trainees. In this case, the goal of narrative is to serve as evidence of reflection of one's own attitudes, and to demonstrate understanding of another's perspective. It also has the potential to document improved self-awareness, performance improvement, and learning about how to think through complex medical dilemmas.

14.5 Remediation Strategies

Let's consider several challenging cases.

- You are meeting with PM, who failed a clinical skills exam because, although his communication skills were strong, he did not collect many key historical facts, did superficial physical exams, demonstrated poor clinical reasoning in his written notes, and displayed a limited number of diagnoses in his differential. When you ask him what he makes of the exam results, he explains that he plans a career in Emergency Medicine, and "while I know that there are other things that might be going on with the patient, my job is to make sure they are not going to die! Let the inpatient docs figure the rest out." When you reach out to his recent clinical supervisors, they report that he is a nice guy, interacts well with patients, knows a lot, and is eager to be helpful, but he often "misses the boat" with patient diagnoses.
- You are working with DK. He is very deferential and polite in your interactions and quiet in small group sessions. He has missed several assignments despite reminders from your course administrator. Your administrator tells you that after several reminders, DK has come by the office and complained that "they should send him an email and he should be able to post his assignments to a web site, like he did in college. When are they going to come into the twenty-first century?" Your administrator tells you that she doesn't want to work with DK any more and that other administrators have had the same experience. You confirm that several other course directors have had similar experience with DK.
- You are a clerkship director. On the second day of the rotation your colleague tells you that the student, RA, has regularly interrupted him in the middle of a conversation with a patient, to disagree with what he was saying.

When you ask RA about it, she explains "the attending was saying something that I didn't think was accurate. We have an obligation to be honest with the patient, don't we?"

- There has been a professionalism complaint filed against SJ, a second-year student who is just starting her physical diagnosis course. For the first hospital-based session, she was partnered with another student whose turn it was to be in the lead and gather the patient's history, while SJ was assigned to observe. SJ repeatedly interrupted her partner's conversation with the patient, asking repetitive questions. When her partner asked her to hold her questions to the end, SJ loudly replied, "I want to make sure this isn't a heart attack." She didn't seem to notice the worried look on the patient's face.

How would we approach such learners? What if you discern that he or she doesn't have insight into the problematic nature of their behavior? What if, despite your effort to prompt reflection, there is no obvious capcity to reflect and the learner sticks to his or her version of the facts, resists discussing specific thoughts or feelings, dismisses the importance of considering the impact of his or her behavior on others, and argues that his or her interpretation makes perfect sense and therefore he or she would not do anything differently?

These cases illustrate, among other things, problems with premature closure (deciding too quickly on a diagnosis without considering other possibilities—see Chap. 6), professionalism, and teamwork. In each case, the learner has difficulty perceiving the perspective of others and lacks awareness of their own biases or assumptions that significantly impact clinical problem solving.

How do we approach the remediation of such learners? How do we engage them in sincere and critical reflection on their own performance? How do we encourage the practice of perceiving multiple perspectives simultaneously? How do we convince them to remain "open-minded," both clinically and interpersonally?

There are many approaches and strategies relevant to the remediation of such physicians or trainees. In Chap. 6, Mutnick and Barone take on premature closure from the perspective of clinical reasoning. In Chap. 7 Bebeau and Faber-Langendoen discuss strategies to address the moral dimensions of these challenges. In Chap. 8, Brondolo and Jean-Pierre tackle perspective taking through the lens of race and racism. In Chap. 13, Quirk explores perspective taking as an aspect of the metacognitive competency. I will explore how to use narrative as a practical tool to enhance reflection and learning.

14.5.1 Reflective Capacity and Motivation to Learn

In remediation, by definition, we are working with students whose initial approach has not worked. A deficit in reflective capacity often manifests as a disagreement about the presence of a learning need between the learner and others. Therefore, the learner can be seen as *unconsciously incompetent*, not yet aware that they have a learning need. They have a serious "blind spot" which they lack the motivation to address [39]. How can we motivate the unconsciously incompetent learner?

14.5.2 Transformative Learning and Remediation

Working with such learners is challenging but critical. What need first and foremost is insight. Theorists have proposed that this kind of transformative learning is stimulated by a "disorienting dilemma" [7, 40, 41] that upon reflection, usually guided by someone with authority, can lead to critically examining beliefs, ultimately leading to new insights and new ways of behaving [42]. How can we promote such insight or point out the disorienting dilemma, while avoiding inducing shame or humiliation in the learner, which would undermine motivation to learn? [43].

Identifying a learner for remediation, under the right circumstances, creates a powerful disorienting dilemma for physicians and trainees. This facilitates the potential transformative impact of narrative reflection. Learners who previously lacked insight can be pushed to examine their own attitudes and beliefs with expert help (see Chap. 16). Writing assignments are a key

component of this work and can achieve success through two pathways: by encouraging perspective taking and through narrative coherence. In doing this, the aim is to deepen the reflection and enhance reflective capacity [44].

14.5.3 Perspective Taking

Medical experts gain insight into the human condition by seeing the self in relation to others [45]. Trainees who require remediation often are dealing with "story deficits." Their incomplete understanding of multiple participants' viewpoints in a story interferes with a full understanding of both self and the situation. They may think they understand themselves, yet they are unaware of the effect that they are having on others. The trainee focused solely on "emergency" diagnoses runs the risk of discounting the patient's desire to know what they do have. It is not sufficient to explain "your chest pain does not represent a heart attack or a pulmonary embolus." The learner who speaks up in the middle of an encounter, either disagreeing with the attending, or speaking aloud about their diagnostic thinking, may not intend to offend the attending, or worry the patient, but seems to be unaware of the possibility that this might occur.

These trainees have a substantially different version of "what happened" (one of the first steps of the reflective cycle) compared to the perspective of others and do not exert effort to see others' perspectives [45]. A writing assignment may help them accomplish this critical task.

In this instance, the challenge of getting learners to engage in reflection cannot be open-ended such as "write a reflective essay…" but needs to focus their attention on key perspectives that you want them to consider. There are a range of prompts designed to raise a trainee's awareness of the perspectives of others, which include the following:

- Assign them to write about their own perspective and defend their point of view.
- Asking them to propose an alternate viewpoint to their own and or adopt another's perspective.
- Propose an alternative viewpoint with an observation.
- Demonstrate other perspective by using a short narrative or poem.
- Using the technique of framing.

For instance, when first sitting down with the student who interrupted the encounter while it was going on, you might ask her:

> *"What effect do you think questioning antibiotic choice in front of the patient might have on the patient's willingness to take any medicines that we prescribe?"*
>
> *"I was curious about your interruption in the middle of the encounter. Tell me what you were thinking about before you did this?" OR "I wonder what you were hoping that would achieve."*

These observations, asked with curiosity rather judgment and followed by a pause, are attempts to get her to stop and think about her actions, reflect on her own internal process, or speculate about intended outcomes. Her answer represents a narrative, because we are asking the learner, after the encounter, to tell a story in which she notices what took place, how she reacted, and how others reacted or might react. Following this dialogue, you could assign the student a written narrative to expand her reflective capacity by using Gibbs' Reflective Cycle as a guide. You should be clear with the student about the goal of the assignment ("We need to deepen your perspective taking and improve your awareness of the impact of your behavior, despite your good intentions"). It should be explicit, defined, and structured.

> *"Write a 500-word reflection on this episode. Describe what happened, what you were thinking and feeling, evaluate what was good and bad about what happened from your perspective, that of your physical diagnosis partner, and the patient, what you make of the situation, what you might have done differently, and what you anticipate you might do the next time you are in a comparable situation. Email this to me by next Monday, and we will meet again Tuesday at 3."*

14.5.4 Sharing Narratives to Address Negative Attitudes

There may be times where sharing different perspectives using published narratives might promote an alternative perspective that learners had not considered.

Consider the following situation. You are on a ward team. You have had many elderly patients with delirium on your service; you have had a number of patients transferred from nursing homes. You have noticed multiple comments made by the residents and students that seem to disparage elderly patients using terms like "gomers" and "veterinary medicine" and perceive these comments to be dehumanizing. You could tell your team that it bothers you, or that it is unprofessional to make such comments. That might work to change their behavior in front of you. But there is an alternative. Choose a 10-min slot during rounds to share and discuss the following poem written by one of our medical students.

Buttered Toast

While I tend the toaster
My mother has dabbed butter
On all six sides of her sourdough.

I am angered by her manners.
Even before her dementia, she was
the immediate light to my darker passion.
So I get offended at her impropriety,
As if manners were a thing that mattered in my family
While I really am angry at my inability
To make her happy, to stop her from losing her
Dignity, in front of strangers on the street, to save her.

And when her brow is tense with frustration,
About food, or the plans for the rest of the day,
Or the inability to come up with any
Word at all, she really is afraid of dying
And sadly grieving the things she knew she lost
though forgot the losing.

But the butter moves into the nooks,
and onto the fingers of Miss Alameda County 1960.
And her eyes widen as she says
Oh, this is so good! and I try like the butter
To melt for both of us. [46]

This poem illustrates a son's grief resulting from a mother's dementia. In the touching conclusion, we see that despite the losses, this woman can still derive great pleasure in eating a piece of buttered toast. This humanizes a woman whom the team may have trouble seeing as anything but a delirious and demented patient. And, through a simple narrative detail in the poem, we see her like her son has, as a once-beautiful woman. A brief discussion of this poem has served to create a highly memorable moment for a clinical team I have led, where insight was gained without the need for me to directly criticize their behavior.

14.5.5 Sharing Narratives to Reinforce and Deepen Positive Attitudes

In teaching about others' perspectives, we don't always need to use negative examples. There is great work each day going on around us, and we can celebrate this by promoting positive examples of physician or student behavior.

In their report of professionalism narratives at Indiana University School of Medicine, Karnieli-Miller and colleagues recount a number of narratives of both professional and unprofessional behavior written from the perspective of third-year students. In one example, a patient with HIV and acute leukemia nears the end of life, and extraordinary measures from multiple attending physicians are taken to insure that the patient is discharged from the hospital to attend her child's graduation in a distant city [19]. In looking at this example, consider asking our learner, "what made it possible for this to happen?" Such a question promotes looking for individual and institutional elements that support exemplary acts of professionalism and reflection on the barriers and promoters to professional behavior for all of us [47].

14.5.6 The Technique of Framing

Others have commented on how language used by medical personnel frames the developing attitude of our learners. In his timeless essay, "Can you teach compassion?" Jerome Lowenstein describes a very common case presentation on rounds on the inpatient service. This trainee started the clinical story the way most do, using standard, impersonal language: "This is the first admission for this 35-year-old IVDA" (IVDA is standard medical terminology for Intravenous Drug Abuser). On that day, he interrupted the presenter and asked the team: "Would our thinking or care be different if you began your history by telling us that this is a 35-year-old Marine veteran who has been addicted to drugs since he served, with valor, in Vietnam?" The medical team was embarrassed and silent as the insight sunk in that by using standard medical nomenclature, they were dehumanizing a person [48].

14.5.7 Seeking the Trainee's Perspective

As shown above, having learners read narratives is a way to help them sharpen their perspective taking. Assigning learners to write narratives can also serve to help us understand the learner's perspective, however objectionable we might perceive their behavior to be. Such assignments must be made direct and clear. Some students find assignments like "write about your reflections on a challenging patient" as "busy work" that forces them to be insincere (an interesting perspective in itself). With trainees who lack insight into their own learning needs, it is best to proceed in steps. Using Gibbs' Reflective Cycle as a guide, the assignments should be very specific.

For example, a first remediation assignment for the student headed into Emergency Medicine is to ask him to describe his approach to a patient with chest pain in the Emergency Department setting, particularly the goals of care for patients who are not admitted to an inpatient unit. Sometimes simply giving a struggling student time to consider his actions and opinions may lead to significant insights for him, which he may express in writing. It also provides a baseline for the ongoing remediation work. Starting this way, by seeking his perspective before addressing the behavior, also models the perspective-taking we hope to enhance.

14.5.8 The Perspective of the Patient and Others

Students are exquisitely sensitive to conflicting values that operate in the clinical environment and are distressed when required to select from mutually exclusive, value-based alternatives [13]. Therefore, a series of brief essays in which the learner is asked to write about the same event from differing viewpoints (*How would the patient presenting to the ER with chest pain perceive your approach*? *How would your ER attending view this*?) may enable him to reconcile some of this distress. This attempt to imagine what it might be like to be a patient in pain who hears: "You are not dying of a heart attack. Why don't you see your primary care doctor next week to figure out what is going on?" is likely to provide material to discuss with the remediation coach and lead to new perspectives on taking short cuts prematurely. Subsequent assignments for this student should include reading and writing an essay on the cognitive errors in diagnosis and common cognitive biases in the emergency department [49] (see also Chap. 6).

For the student who interrupted her attending physician because of her concern that what the physician said somehow compromised honesty with the patient, those in charge of remediation might choose a parallel writing prompt, such as:

You are seeing a patient. You feel confident that you know what is going on with the patient. You are explaining this to your patient, and right in the middle of your explanation, a second-year student, whom you offered to have shadow you, interrupts and contradicts what you are telling the patient. Write a narrative detailing what you would do in this situation, what you would think and feel about the interruption, and how it might influence what the patient thought of you and what you were saying to them. Detail what you would say to the student.

An extension of this assignment might include a narrative coda: *After the encounter, you go and look up what the second-year student was saying, and find out that it was correct. Does this alter your thoughts and feelings about what happened*? *Given your thoughts about how you might have acted in a situation in which you were interrupted, does this situation prompt you to re-think how you dealt with your attending*?

14.5.9 Perspective Switching

Perspective switching is a variation on this theme. You might give the student a published narrative of a challenging situation and ask him to imagine being the faculty member asked to deal with the trainee in this situation. Stories such as William Carlos Williams' "The Use of Force" [50], in which a learner loses his composure, or a

narrative in the Piece of My Mind section of *JAMA* called "It's over, Debbie" [51], in which learner takes part in a "physician-assisted suicide," make good material for this exercise.

This role exchange exercise is designed to put the learner in a new position, trying to encourage adoption of a new perspective, which entails looking beyond their own, and imagining the perspective of another, the very task they find challenging [28].

Collectively, these exercises allow learners to engage in critical reflection in a series of steps. Initially, we ask for their version of the events and debrief this by changing the frame by asking "what if" questions. We can present them with an alternative narrative from the literature, ask them to write a narrative to illustrate another "character's" perspective, ask them to take on a faculty role through "role exchange," or share with them a series of narratives from the literature that comment on the same theme in their narrative. Saving these narratives and reviewing them in sequence provides evidence of the growing perspective taking ability (or lack thereof).

14.5.10 Fostering Narrative Coherence

It was the early days of the HIV epidemic. I was at the beginning of my career as a physician, and I was seeing the next in a series of HIV-infected drug-addicted patients who I was going to follow longitudinally. As I took her social history, she told me that she began drinking alcohol regularly with her parents at the age of 6. She was sexually abused by her uncle and became pregnant at the age of 14, at which time she dropped out of high school and entered a series of increasingly challenging foster care settings. When I asked her how she had coped with all of these challenges, she laughed at me and answered: "I became a drug addict!" I was shocked at the powerful impact her laughter had on me. Because of my limited personal experience of drug abuse, my happy family life, and biases based on news accounts and popular press, I held beliefs that demonized drug users. In that moment, I had insight. I was shocked out of my previously held beliefs by the fact that this woman's drug addiction made perfect sense in the context of her life.

People do things for a reason, their reasoning can be elucidated, and similar reasoning will inform subsequent actions. This concept of "narrative coherence" [52] suggests "characters act in a reliable manner." The concept of narrative coherence has informed my subsequent practice, leading me to elicit information during my patient interviews to understand behavior or symptoms that at first do not make sense. This enables my therapeutic rapport building and as a result enhances my clinical competence.

14.5.11 Using Narrative to Remediate Unprofessional Behavior

The student who administrators despise because he is condescending and disparaging while course leaders find pleasant because he is deferential, desperately needs to see and understand how others interpret his conduct. He may not see that his behavior reflects poorly on him and may negatively impact his clinical effectiveness and teamwork. He needs to reflect on his actions and the assumptions and beliefs underlying his behavior. Lecturing him on professionalism seems unlikely to be taken seriously enough by this student to change his future conduct, because it won't create a "disorienting dilemma" powerful enough to produce the needed insight and empathy for others.

Helping him discover that his behavior is unprofessional and therefore makes him an incompetent physician might do the trick. Requiring him to write a reflective essay that takes the administrator's point of view about his behavior, assuming the administrator's reaction makes sense, may produce the needed insight or uncover a more serious concern about his medical professionalism. If this simple strategy isn't successful, other approaches can be tried (see Chap. 7), or you may judge that the stakes must be raised for the student by initiating a more formal review of the student's pattern of behavior (see Chap. 20).

14.6 Faculty Development

Facilitating or coaching for the purpose of remediation using narrative is challenging yet can be highly satisfying. In this chapter we provided a basic introduction to both reflection and narrative as it can be used in remediation. The following are key issues faculty must keep in mind when using narrative with this group of learners.

Faculty must be goal-oriented and realistic. The purposes of asking a student to reflect are to deepen his or her understanding of self and the situation and inform subsequent action under similar circumstances. This is a learning experience meant to foster metacognitive skills essential for lifelong and self-directed learning (discussed in depth in Chap. 13).

Faculty must design useful narrative reflective assignments. These should be focused, structured, and clearly defined as modeled above.

Faculty need to be able to create a safe learning environment, be comfortable with strong emotions, and be willing to provide clear feedback and follow-up to the trainee [53] (see Chaps. 2, 15, and 16).

Faculty members need to feel equipped to set up and assess written reflections. Models for evaluation are being developed [54] that allow for assessment of the depth of reflection, distinguish between reflective writing skills and storytelling [55], and provide step-by-step instructions for conducting narrative analysis [56]. The strategy you choose to use should be selected to best fit the purpose of the narrative exercise. What seems most promising for evaluation of narratives used for remediation is the recent REFLECT framework developed by Wald and colleagues. They describe four levels of reflection on a spectrum, from discussion using (1) "habitual action" or non-reflective descriptions, to (2) "thoughtful action or introspection," which has more elaborate description yet limited analysis, to (3) "reflection" that includes attempts to understand or analyze a situation through clear description of the conflict or challenge, or explores emotions and attempts to look for meaning, to (4) "critical reflection," which adds to simple reflection by exploring and critiquing personal assumptions and exploring alternate perspectives fully [44].

Faculty must be prepared to judge a trainee's reflective ability. For reflection to lead to performance improvement, learners must be willing to engage deeply in thinking about situations that have gotten them into trouble. Under the right circumstances, many physicians and trainees are able to engage in this type of reflection and even enjoy writing assignments, but some do not. In fact, some are not inclined to be introspective, may resist reflection, and may refuse to write anything that reveals personal thoughts or feelings. In the end, as with all remediation activities, judgments about whether this constitutes clinical incompetence or not must be made and documented.

For faculty members interested in learning more, there are a number of educational strategies for developing reflection and reflective capacity [7], guided reflection, and useful resources for faculty and faculty development [44]. A variety of additional methods have been described to help physicians enhance personal awareness through reflection [16, 29, 57, 58] (see Chap. 11).

14.7 Conclusion

Using narrative as a form of reflection for remediation of learners and more broadly in medical education has potentially far-reaching implications. Narrative seeks to explore the depths of an experience [31] and seeks a fuller understanding of both the self and of the situation, both desired outcomes of reflection [7]. Narrative is especially useful for helping to explore complex situations encountered in medicine, uncover biases and assumptions, elicit multiple perspectives, plumb the depths of our thoughts and feelings, and reinforce our choices or propose alternate actions for times when we encounter similar situations in the future. Clearer outcomes need to be delineated [59], but enhanced self-awareness, problem solving, and empathic understanding of patients are potentially demonstrable endpoints. With learners

who require remediation and may not naturally be inclined toward reflection, challenging them to write clear narrative, which demonstrates the willingness to reflect, is the first step. Reflection as described in this chapter is clearly an important metacognitive skill closely related to the process of "slowing down when you have to," described in studies of expert clinicians who, when facing something unexpected or challenging consciously, switch into a more deliberate, effortful, yet mindful state that can ultimately lead to the delivery of expert, value-based, patient-centered, safe patient care [60]. (See Chaps. 1 and 6 for discussion of the related processes of Expertise Development and Dual Process Thinking.)

References

1. Cooke M, Irby DM, O'Brien BC. Educating physicians: a call for reform of medical school and residency. San Francisco: Jossey-Bass; 2010. p. 304.
2. Accreditation Council for Graduate Medical Education (ACGME). ACGME 2012 standards—review and comment—Phase II [Internet]. Chicago, IL: ACGME; 2000 [cited 2013 Jun 29]. http://www.acgme-nas.org/milestones.html
3. Association of American Medical Colleges. Behavioral and Social Science Foundations for Future Physicians [Internet]. Washington, DC: Association of American Medical Colleges; Nov 2011 [cited 25 June 2013]. p. 45. https://www.aamc.org/download/271020/data/behavioralandsocialsciencefoundationsforfuturephysicians.pdf
4. Witzburg RA, Sondheimer HM. Holistic review—shaping the medical profession one applicant at a time. N Engl J Med. 2013;368(17):1565–7. doi:10.1056/NEJMp1300411.
5. Muller D. Reforming premedical education—out with the old, in with the new. N Engl J Med. 2013;368(17):1567–9. doi:10.1056/NEJMp1302259.
6. Rosenthal E. Pre-Med's new priorities: heart and soul and social science. NY Times (National Ed) [Internet]. Accessed 13 April 2012 [cited 20 June 2013]: Education Life. http://www.nytimes.com/2012/04/15/education/edlife/pre-meds-new-priorities-heart-and-soul-and-social-science.html?pagewanted=all&_r=0
7. Sandars J. The use of reflection in medical education: AMEE Guide no. 44. Med Teach. 2009;31(8):685–95.
8. Duffy FD, Holmboe ES. Self-assessment in lifelong learning and improving performance in practice: physician know thyself. JAMA. 2006;296(9):1137–9. PubMed PMID: 16954495.
9. Greenberg L, Blatt B. Successfully negotiating the clerkship years of medical school: a guide for medical students, implications for residents and faculty. Acad Med. 2010;85(4):706–9. doi:10.1097/ACM.0b013e3181d2aaf2.
10. Schon DA. Educating the reflective practitioner: toward a new design for teaching and learning in the professions. San Francisco: Jossey-Bass; 1987. p. 355.
11. Neumann M, Edelhauser F, Tauschel D, Fischer MR, Wirtz M, Woopen C, Haramati A, Scheffer C. Empathy decline and its reasons: a systematic review of studies with medical students and residents. Acad Med. 2011;86(8):996–1009. doi:10.1097/ACM.0b013e318221e615.
12. Hojat M, Mangione S, Nasca TJ, Rattner S, Erdmann JB, Gonnella JS, Magee M. An empirical study of decline in empathy in medical school. Med Educ. 2004;38(9):934–41. PubMed PMID: 15327674.
13. Ginsburg S, Regehr G, Hatala R, McNaughton N, Frohna A, Hodges B, Lingard L, Stern D. Context, conflict, and resolution: a new conceptual framework for evaluating professionalism. Acad Med. 2000;75(10 Suppl):S6–11. PubMed PMID: 11031159.
14. Ginsburg S, Regehr G, Lingard L. The disavowed curriculum: understanding student's reasoning in professionally challenging situations. J Gen Intern Med. 2003;18(12):1015–22. PubMed PMID: 14687260.
15. Custers EJ, Stuyt PM, De Vries Robbé PF. Clinical problem analysis (CPA): a systematic approach to teaching complex medical problem solving. Acad Med. 2000;75(3):291–7. PubMed PMID: 10724322.
16. Novack DH, Suchman AL, Clark W, Epstein RM, Najberg E, Kaplan C. Calibrating the physician. Personal awareness and effective patient care. Working Group on Promoting Physician Personal Awareness, American Academy on Physician and Patient. JAMA. 1997;278(6):502–9. PubMed PMID: 9256226.
17. Kolb DA. Experiential learning: experience as the source of learning and development. Englewood Cliffs, NJ: Prentice-Hall; 1984. p. 256.
18. Branch Jr WT. Use of critical incident reports in medical education. A perspective. J Gen Intern Med. 2005;20(11):1063–7. PubMed PMID: 16307635.
19. Karnieli-Miller O, Vu TR, Holtman MC, Clyman SG, Inui TS. Medical students' professionalism narratives: a window on the informal and hidden curriculum. Acad Med. 2010;85(1):124–33. doi:10.1097/ACM.0b013e3181c42896.
20. Karnieli-Miller O, Vu TR, Frankel RM, Holtman MC, Clyman SG, Hui SL, Inui TS. Which experiences in the hidden curriculum teach students about professionalism? Acad Med. 2011;86(3):369–77. doi:10.1097/ACM.0b013e3182087d15.
21. Krasner MS, Epstein RM, Beckman H, Suchman AL, Chapman B, Mooney CJ, Quill TE. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. JAMA. 2009;302(12):1284–93. doi:10.1001/jama.2009.1384.

22. Treadway K, Chatterjee N. Into the water—the clinical clerkships. N Engl J Med. 2011;364(13):1190–3. doi:10.1056/NEJMp110067.
23. Kjeldmand D, Holmstrom I. Balint group as a means to increase job satisfaction and prevent burnout among family practitioners. Ann Fam Med. 2008;6(2):138–45. doi:10.1370/afm.813.
24. Gibbs G. Learning by doing: a guide to teaching and learning. London: FEU; 1988. p. 129. http://www2.glos.ac.uk/gdn/gibbs/index.htm. Accessed 25 July 2013, Created by Claire Andrew created January 2001.
25. Brookfield SD. Becoming a critically reflective teacher. San Francisco: Jossey-Bass; 1995. p. 296.
26. Verghese A. The physician as storyteller. Ann Intern Med. 2001;135:1012–7.
27. Charon R. Narrative and medicine. N Engl J Med. 2004;350(9):862–4. PubMed PMID: 14985483.
28. DasGupta S, Charon R. Personal illness narratives: using reflective writing to teach empathy. Acad Med. 2004;79(4):351–6. PubMed PMID: 15044169.
29. Hatem D, Ferrara E. Becoming a doctor: fostering humane caregivers through creative writing. Patient Educ Couns. 2001;45(1):13–22. PubMed PMID: 11602364.
30. Epp S. The value of reflective journaling in undergraduate nursing education: a literature review. Int J Nurs Stud. 2008;45(9):1379–88. doi:10.1016/j.ijnurstu.2008.01.006.
31. Bolton G. Stories at work: reflective writing for practitioners. Lancet. 1999;354(9174):243–5. PubMed PMID: 10421319.
32. Petrie KJ, Booth RJ, Pennebaker JW, Davison KP, Thomas MG. Disclosure of trauma and immune response to hepatitis B vaccination program. J Consult Clin Psychol. 1995;63(5):787–92. PubMed PMID: 7593871.
33. Smyth JM, Stone AA, Hurewitz A, Kaell A. Effects of writing about stressful experiences on symptom reduction in patients with asthma and rheumatoid arthritis. JAMA. 1999;281(14):1304–9. PubMed PMID: 10208146.
34. Pennebaker JW. Telling stories: the health benefits of narrative. Lit Med. 2000;19(1):3–18. PubMed PMID: 10824309.
35. Levine RB, Kern DE, Wright SM. The impact of prompted narrative writing during internship on reflective practice: a qualitative study. Adv Health Sci Educ Theory Pract. 2008;13(5):723–33. PubMed PMID: 17899421.
36. Shapiro J, Kasman D, Shafer A. Words and wards: a model of reflective writing and its uses in medical education. J Med Humanit. 2006;27(4):231–44. PubMed PMID: 17001529.
37. Kleinman A, Benson P. Anthropology in the clinic: the problem of cultural competency and how to fix it. PLoS Med. 2006;3(10):e294. PubMed PMID: 17076546.
38. Bolton G. Reflective practice: writing and professional development. 3rd ed. London: Sage; 2010. p. 272.
39. Luft J, Ingham H. The Johari Window, a graphic model of interpersonal awareness. In: Proceedings of the western training laboratory in group development, Los Angeles; 1955.
40. Mezirow J. A critical theory of adult learning and education. Adult Educ Q. 1981;32(1):3–24. doi:10.1177/074171368103200101.
41. Mezirow J. Transformative dimensions of adult learning. San Francisco: Jossey-Bass; 1994. p. 247.
42. Cranton P. Understanding and promoting transformative learning: a guide for educators of adults. San Francisco: Jossey-Bass; 1994. p. 252.
43. Lazare A, Levy RS. Apologizing for humiliations in medical practice. Chest. 2011;139(4):746–51. doi:10.1378/chest.10-3334.
44. Wald HS, Borkan JM, Taylor JS, Anthony D, Reis SP. Fostering and evaluating reflective capacity in medical education: developing the REFLECT rubric for assessing reflective writing. Acad Med. 2012;87(1):41–50. doi:10.1097/ACM.0b013e31823b55fa.
45. Quirk ME. Intuition and metacognition in medical education: keys to developing expertise. New York: Springer; 2006. p. 151.
46. Bonavitacola P. Buttered Toast (unpublished poem). Medical Student at University of Massachusetts School of Medicine; 2013.
47. Inui TS, Cottingham AH, Frankel RM, Litzelman DK, Suchman AL, Williamson PR. Supporting teaching and learning of professionalism—changing the educational environment and students navigational skills. In: Cruess RL, Cruess SR, Steinert Y, editors. Teaching medical professionalism. New York: Cambridge; 2009. p. 108–23.
48. Lowenstein J. Can you teach compassion? In: Coles R, Testa R, editors. A life in medicine: a literary anthology. New York: New Press; 2002.
49. Croskerry P. The importance of cognitive errors in diagnosis and strategies to minimize them. Acad Med. 2003;78(8):775–80. PubMed PMID: 12915363.
50. Williams CW. The use of force. In: Williams CW, Coles R, editors. The doctor stories. New York: New Directions; 1984.
51. A piece of my mind. It's over, Debbie. JAMA. 1988;259(2):272. PubMed PMID: 3339794.
52. Fisher WR. Narration as a human communication paradigm: the case of public moral argument. Commun Monogr. 1984;51:1–22.
53. Aronson L. Twelve tips for teaching reflection at all levels of medical education. Med Teach. 2011;33(3):200–5. doi:10.3109/0142159X.2010.507714.
54. Learman LA, Autry AM, O'Sullivan P. Reliability and validity of reflection exercises for obstetrics and gynecology residents. Am J Obstet Gynecol. 2008;198(4):461.e1–8; discussion 461.e8–10. doi:10.1016/j.ajog.2007.12.021.
55. Aronson L, Niehaus B, DeVries CD, Siegel JR, O'Sullivan PS. Do writing and storytelling skill influence assessment of reflective ability in medical students' written reflections? Acad Med. 2010;85(10 Suppl):S29–32.doi:10.1097/ACM.0b013e3181ed3aa7.

56. Reis SP, Wald HS, Monroe AD, Borkan JM. Begin the BEGAN (The Brown Educational Guide to the Analysis of Narrative)—a framework for enhancing educational impact of faculty feedback to students' reflective writing. Patient Educ Couns. 2010;80(2): 253–9. doi:10.1016/j.pec.2009.11.014.
57. Smith RC, Dwamena FC, Fortin VI AH. Teaching personal awareness. J Gen Intern Med. 2005;20(2): 201–7. PubMed PMID: 15836555.
58. Charon R. The patient-physician relationship. Narrative medicine: a model for empathy, reflection, profession, and trust. JAMA. 2001;286(15):1897–902. PubMed PMID: 11597295.
59. Mann K, Gordon J, MacLeod A. Reflection and reflective practice in health professions education: a systematic review. Adv Health Sci Educ Theory Pract. 2009;14(4):595–621. PubMed PMID: 18034364.
60. Moulton CA, Regehr G, Lingard L, Merritt C, MacRae H. Slowing down to stay out of trouble in the operating room: remaining attentive in automaticity. Acad Med. 2010;85(10):1571–7. doi:10.1097/ACM.0b013e3181f073dd.