

Reflection in/and Writing: Pedagogy and Practice in Medical Education

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Abstract

During the past decade, “reflection” and “reflective writing” have become familiar terms and practices in medical education. The authors of this article argue that the use of the terms requires more thoughtfulness and precision, particularly because medical educators ask students to do so much reflection and reflective writing. First,

the authors discuss John Dewey’s thoughts on the elements of reflection. Then the authors turn the discussion to composition studies in an effort to form a more robust conception of reflective writing. In particular, they examine what the discipline of composition studies refers to as the writing process. Next, they offer two

approaches to teaching composition: the expressivist orientation and the critical/cultural studies orientation. The authors examine the vigorous debate over how to respond to reflective writing, and, finally, they offer a set of recommendations for incorporating reflection and reflective writing into the medical curriculum.

One can think reflectively only when one is willing to endure suspense and to undergo the trouble of searching.¹

Similar to other teaching and learning trends, such as professionalism or competencies, which medical educators have widely accepted over the past several decades, “reflection” and “reflective writing” have become familiar terms and practices. Medical educators ask students to write reflection papers as part of their pediatrics,² obstetrics–gynecology,³ and surgery clerkships⁴; as a method to increase empathic interactions with patients^{5–7} and to improve communication skills⁸; and as ruminations on professionalism,^{9,10} spirituality,¹¹ and

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women’s health.¹² Moreover, the emphasis on reflection is not limited to medical students; a robust literature on reflection and reflective writing also exists for residents^{13–15} and attending physicians.^{16–18}

Most often, educators ask medical students to reflect on an *experience*, which philosopher and educator John Dewey¹⁹ places at the very heart of education, arguing that education is, in essence, the “reconstruction or reorganization of experience.” Following from Dewey, Rodgers²⁰ makes the case that “an experience is not an experience unless it involves interaction between the self and another person, the material world, the natural world, an idea, or whatever constitutes the environment at hand.”

When *experience* is used with medical students, it might refer to a patient interaction, an ethical issue, a short story, or the passing comments of an attending physician. Moreover, it might refer to something more than a discrete event or specific text—such as an entire clerkship or a service learning project.

We argue that the use of “reflection” in medical education requires more thoughtfulness and precision, especially because, as educators, we ask students to do so much of it, and we ourselves sprinkle it so liberally across academic discourse. Is reflection merely mulling over an experience? Is it stream of consciousness? Is it synonymous with thinking about and recounting an event or a feeling? Does journaling count as reflection? How do portfolios serve

as “evidence” of reflection? Rodgers²⁰ addresses the problem directly and succinctly: “Reflection has suffered from a loss of meaning. In becoming everything to everybody, it has lost its ability to be seen.” Much like “professionalism” and “competencies,” educators often use the term carelessly and casually, embedding it throughout local curricula and within national organizations, boards, and accrediting agencies—even as something to be quantitatively assessed.

Moreover, some scholar–educators now argue that “the original idea of reflection as a tool for critical praxis is reversed and instead it becomes a tool for control and orthodoxy.”²¹ How can the authenticity of learners’ experiences be encouraged and sustained in an environment of formulaic approaches and growing demands for documented outcomes and demonstrated competencies?²² As subjects themselves who are constantly monitored and evaluated across various institutional settings (classrooms, hospitals, clinics), medical students enact the internal training that philosopher Michel Foucault describes as the effect of disciplinary power, which relies on surveillance “to incite states of docility ... to ‘correct’ individuals and ... to develop skills as a way to differentiate novices” from supervisors.²³ **Educators must consider how overly regulated exercises in reflection might inadvertently serve as tools for surveillance and regulation rather than as opportunities for revelation and transformation.**

Because true reflection—not responding to placate supervisors—is such a vital learning tool, it is worthy of much more thoughtful attention, much more conscientious usage than as a catch-all phrase to describe what we think students are doing when they gather in small groups or when we ask them to write. We propose that reflection be approached as neither a singular event nor as a nebulous method but as part of a larger, ongoing *process* in the education of physicians—that is, as an ethos in the medical environment. In the following discussion, we will first establish what we mean when we use the word *reflection* in general, and then what it signifies as it relates to writing specifically, borrowing from composition studies for ways that may be useful to medical education. We will briefly explore two approaches to teaching composition (the expressivist and the critical/cultural orientations). Finally, we will examine the challenging and controversial issues surrounding the evaluation of reflective writing, offering suggestions for reflection in medical education.

The Elements of Reflection

Reviewing the terms *reflection*, *reflective practice*, and *reflective writing* historically and across disciplines is a daunting and unwieldy task. Mann and colleagues²⁴ make a laudable attempt in a 2009 review of the health professions literature to summarize the major theories and models of reflection in medical education and medical practice. Wald and colleagues²⁵ also make significant contributions to understanding the role of reflection in medicine. Most of the significant theorizing on reflection, however, arises out of the disciplines of philosophy and education, and much of that, from the mid-20th century on, builds on John Dewey's critical work. Thus, we will cross the border of medical education to explore how the elements of Dewey's theory of reflection and the theorizing of scholars who have expanded his thinking on those elements—elements such as elaboration, puzzling, process, and transformation—might be integrated and developed within medical settings.

To begin, Moon²⁶ elucidates several key components of reflection that offer medical educators a loose shape to gauge whether or not what they are asking students to do is, indeed, reflection.

First and foremost, he suggests that people reflect on an experience in order to think about it in more detail, which requires some degree of *elaborating on* or *interrogating* that experience. Most events—either affirming or troubling—that evoke reflection arise from everyday experiences, some of them unsettling, stopping us in our tracks; others take hold “over time, causing a dissatisfaction which leads to a reconsideration of them.”²⁷ Boud and colleagues write that such a reconsideration “may stimulate a reappraisal of other tasks and the planning of new experiences.”²⁷

Second, reflection has a purpose: the need to “work out” an issue or felt difficulty arising from an experience. This working out has analytical dimensions, including the act of *puzzling* over an experience, as well as attempts at *puzzle solving*. Dewey¹ describes it as “a state of doubt, hesitation, perplexity, mental difficulty, in which [reflective] thinking originates” and as “an act of searching, hunting, inquiring, to find material that will resolve the doubt, settle and dispose of the perplexity.” Although Dewey uses the word “resolve,” we avoid any suggestion of closure, believing that a broader openness or receptiveness to possibilities is a more fruitful, less intentional way to think about grappling with the issue at hand.

In fact, the third element of reflection involves “complicated mental processing of issues for which there is no obvious solution.”²⁶ Reflection involves “more processing than would occur when simply recalling something.”²⁶ Such processing is critical because reflecting on an experience is more than merely describing it. Rather, it brings together previous experiences or accumulated knowledge in order to make sense of something else, something that has just occurred. Rodgers²⁰ cites Dewey's assertion that

reflection is a meaning-making process that moves learners from one experience into the next, each time with a deeper understanding of its relationships with and connections to other experiences and ideas. It is the thread that makes continuity of learning possible.

In this processing of an experience, it is important for learners not only to replay the experience but also to attend to how they felt during its occurrence.²⁷ That is, the memory of the experience is

evoked for new examination when more facts, more feelings, more knowledge, new angles, and novel imaginative associations between this experience and others present themselves. These new imaginings and ideas—often suggested by teachers, mentors, or peers—may alter the experience itself. Mezirow²⁸ argues that

imagination is indispensable to understanding the unknown. We imagine alternative ways of seeing and interpreting. The more reflective and open to the perspectives of others we are, the richer our imagination of alternative contexts for understanding will be.

Hullfish and Smith²⁹ describe the process as follows:

One cannot, of course, change yesterday's reality, but one can change or increase one's understanding of it and hence change its significance. Its influence on later action is thus modified; hence, in this sense, it is changed, being quite a different stimulus than it was previously. After one has exposed a memory to such a “going over,” it may again be difficult to recreate, on demand, only the exact events that actually took place. Yet, if the “going over” has resulted in deeper understanding, the colored recollection may be, in some sense, more accurate than the original unadorned one.

This “going over” is where hunches, guesses, ideas, interpretations, and insights about an experience occur.

“Going over” or processing an experience often involves or provokes *transformative action*, a fourth component of reflection, which is often omitted from discussions because of the misperception or uneasiness that *action necessarily entails a motor event*. Action may be physical, involving doing or saying something differently the next time a similar situation is confronted. However, it may also be adopting a new attitude or changed thinking, such as the critical interrogation of the politics and power of medicine, that can subsequently influence experiences or interactions. It may be a deepened commitment, a change of heart, or a renewed desire to continue investigating or to puzzle further over an experience.

In fact, the best reflective writing discussions and assignments emphasize this fourth element—transformative action—in the same way that the best

discussions of clinical empathy insist that empathy leads to the alleviation of suffering.^{6,30} **Through transformative action, reflective practices can move beyond a cul-de-sac of self-congratulation for engaging in the reflective process to a recognition of the need for ethical action—taking a risk, redressing a wrong, or, at the very least, resolving to do things differently the next time.** Reflective writing assignments can move toward transformative action in required revisions. For example, after students have written about experiences in which they acted wrongly or failed to act to prevent a wrong (an exercise that comes comparatively easy to them and is often accompanied by justifications for the wrong action or inaction), a required revision might be for the students to rewrite the experience by imagining as realistically as possible how they would (hopefully how they *will*) act differently on the next occasion. This exercise helps them to imaginatively rehearse the context, the language they will use, the resistance they might encounter, and the resistance they might feel while trying to act. **The point here is not simply to recognize wrong or even to cite moral principles and arguments against the wrong; rather, it is to re-think and maybe re-form decisions and actions.**

This emphasis on transformative action also shifts reflective practice from a solitary act to a social one, a practice in which individuals look outside—to others—as well as inside themselves. Rodgers²⁰ writes that critical to this fourth element of reflection is that it “needs to happen in community,” that transformative action “requires attitudes that value the personal and intellectual growth of oneself and of others.” Such interaction involves expressing oneself so that other people might understand, just as Dewey¹⁹ denotes: “The experience has to be formulated in order to be communicated ... [which] requires getting outside of [it].”

These four general components of reflection are often distinguished and described in theoretical considerations of the subject, but they are not procedures or “tools” to be learned, exhibited, and used in teaching. Nor do they present an instrumental approach that leads educators or learners from one element on a hierarchy to another, higher

element. However, to the extent that, throughout medical education, writing has become one of the most standard maneuvers deployed to develop the reflective capacity of learners, a deeper understanding of writing as a tool for reflection is warranted.

Composition Studies, Reflection, and Medical Education

In spite of the widespread presence of reflective writing in the medical curriculum, educators have not yet mined the rich vein of composition studies, an academic field that examines the history, trends, methods, issues, pedagogies, and themes in writing genres and processes. The theory and practice of this field can guide not only the way in which medical educators think about why, how, when, and where students are asked to write (versus merely discuss), but also the way in which writing is framed as an important part of the reflective process. Below we discuss three major trends in composition studies that could be useful to medical educators: (1) the writing process, (2) expressivist composition, and (3) the critical study of culture in composition.

The writing process

When composition scholars first used the term *writing process* nearly 40 years ago, attention and emphasis shifted from the products to the process of writing. The writing process includes working through several overlapping and indistinct stages of writing, such as prewriting, drafting, revision, and editing. Although we are not suggesting that such steps be exactly replicated in medical education, **we do argue for the value of borrowing from the spirit of these stages to inform what we do in important ways.** For example, a “prewriting” exercise for medical students may be to closely and critically listen, notice, and document their observations of an event—prior to beginning any formal preclinical or clinical writing assignment. In this way, students may come to recognize that just as articles and essays do not simply appear, that just as authors gather information and ideas from a variety of sources, so, too, **“meanings don’t just happen: we make them; we find and form them ... out of a chaos of images, half-truths, remembrances, syntactic fragments, from the mysterious and unformed.”**³¹ Later, when students actually begin to compose

essays about their experiences, they may realize that writing itself—searching for (and finding!) the words to describe, illustrate, or explain a situation or reaction is a method of inquiry, discovery, and analysis—a way of “wording” the world into existence.³² Richardson³² points out: “This ‘worded world’ never accurately, precisely, completely captures the studied world, yet we persist in trying. Writing as a method of inquiry honors and encourages the trying.”

In fact, writing involves learning to recognize and tolerate ambiguities—what I.A. Richards³³ called “the hinges of thought.” Medical students are awash in ambiguities—intense competition, derogatory humor directed at patients, inequities in care. These and other ambiguities compel students not only to change the way they think about and live with such issues but also to expand the interpretive frameworks they use to make sense of them. When students write, they are in dialogue with their various selves, including past, present, and future selves. As they draft their essays, they speculate on the changing meanings of events, and this speculation offers “opportunities for analysis and revision of [their] ideas.”³⁴

Grappling with ambiguities and shifting meanings, a significant part of the writing process, is a key aspect of reflective writing, one that makes the distinction between writing as *knowledge telling* versus *knowledge transforming*. The former involves ideas reclaimed from memory in response to questions or prompts, whereas the latter involves more than “translating preexisting content.”³⁵ Knowledge transforming entails “working out new content,” whereby “what one thinks *emerges in the text as it is produced*”³⁵ (emphasis added). In other words, the idea is not that “which lies behind the text directing its production.”³⁵ Rather, the writing *itself* produces and constitutes a new idea. This knowledge transformation is especially important for students who arrive at medical school full of compassion, the desire to heal, and the belief that all patients are worthy of their attention, and then observe not only amazing enactments of such values but also blatant disregard for them in clinical and academic settings. When students write about these experiences, reflecting on them can be “unsettling, uncomfortable,

even painful,” but doing so is “part of the effort to attain a more complex understanding” of the culture in which they find themselves.³⁶ Knoeller³⁷ calls this process “narratives of rethinking” wherein students “test perspectives and recount turning points in their understanding,” wherein they “voice ideas that they once, but no longer, subscribe to—contrasting their previous positions with new ones.”

Although examining the process and act of writing is important, so, too, is understanding and examining the purposes of writing. **Reflective writing should not be an invitation to judge individuals or environments but, rather, an opportunity for students to examine experiences critically, to size them up from their own perspectives, and to work out new ways of seeing, understanding, and influencing culture.** Whereas some educators invite students to turn inwardly, reflecting on personal and professional values and identities, others ask them to look outwardly to unearth deeper understandings of social phenomena.

The internal view: Expressivist composition

In the early 1990s, composition scholars and educators began advocating and practicing an “expressive” mode of teaching composition. Burnham’s description of expressive composition (quoted in Fulkerson³⁸) positions the writer “in the center” of the writing process, giving the “highest value to the writer and her imaginative, psychological, social, and spiritual development and how that development influences individual consciousness and social behavior.” However, those who value an expressivist orientation are not uniform in their beliefs. For example, Fulkerson³⁸ identifies several disparate goals of expressivist writing: as a way for students to “mature and become more self-aware, more reflective”; as a means of healing or therapy; or as venue for creative self-expression with topics selected by teachers or students.

In our own and in many other institutions, expressivist writing is an oft-used pedagogy. Medical education is a profound, life-altering experience, over the course of which students dissect a cadaver, give bad news to a patient,

deliver a baby, and witness a person’s death. Medical students are routinely beleaguered and often fatigued as they move through the curriculum, all the while trying to maintain their core values, to remember what brought them to medicine, and to remain active agents in their own emerging professional identities. Although Anderson and MacCurdy³⁹ focus on writing in response specifically to traumatic events, their expressivist orientation resonates with many who ask medical students to write:

As we manipulate the words on the page, as we articulate to ourselves and to others the emotional truth of our pasts, we become agents for our own healing, and if those to whom we write receive what we have to say and respond to it ... we create a community that can accept, contest, gloss, inform, invent, and help us discover, deepen, and change who we have become as a consequence of [what] we have experienced.

Having a sense of agency over the development of their professional identities is vitally important for medical students. Such agency can serve as an antidote both to the all-too-common unconscious identity development that can occur when students do not have the opportunity to reflect on their experiences and to the dissatisfied or disillusioned professional self that may result. Further, the potential discourse that evolves when expressive writing is shared, either with a single faculty facilitator or with a group of peers, can promote varied and broader ways of seeing for all involved.

The social turn: Critical/cultural studies

Some educators would prefer that students’ writing be less individualistic and more focused on cultural contexts, particularly issues surrounding power and inequality.

Over the past 20 years, cultural studies have influenced many disciplines and pedagogies including composition studies. In fact, Fulkerson³⁸ claims that the study of culture has been the “major movement” in the field. Within this orientation to writing, students read and write about acts of injustice that are based on race, class, gender, ethnicity, sexual identity, and/or other markers of difference. The “texts” students produce may be literary or historical; they may be the products of current technologically

advanced media; and they may be works of art or cultural artifacts. Their commonality is that they raise issues related to power, authority, and justice in medicine and in the larger culture.

Examining the culture of medicine is especially important because students are immediately drawn into the language of medicine (some of which is highly coded to signify very specific values) and immersed into the cultural environments of medical education and clinical sites. Language and cultural environments have powerful socializing effects of which students become increasingly unaware. Thus, the social orientation offers an extraordinary venue to medical educators committed to providing students with opportunities to examine critically the origins and nature of not only their personal beliefs and values but also the beliefs and values embedded in the curriculum, in the learning environment, and in the institutional policies (local *and* national) that dictate their education. Further, a cultural orientation provides educators with a means to encourage students to critique not only where these beliefs and values align and where they clash but also how they influence the quantity and quality of care they give to patients.

A social/cultural orientation is an antidote to Giroux’s suggestion (quoted in Macedo and Bartolomé⁴⁰) that students often experience the curriculum as “a form of learning that prescribes, dictates, but never really critically engages them to ask tough questions.” Such a curriculum, he argues,

is a lethal practice and in its various educational mutations it still manages to deskill, disempower, and uneducate. The message is clear: Don’t ask me to take a chance, interrogate my own privileges, learn how to be a critical agent.

Giroux goes on to say that not challenging students to move beyond their “comfort zones” both “displaces any possibility of discussing difficult and complex issues” and “serves to reproduce a kind of privileged, middle-class mentality.”⁴⁰

Medical educators who step out of the comfort zone—both by being critical while being supportive and by encouraging their students to do the same—begin to craft curriculum

spaces where puzzling can occur, where difficult and complex matters are raised. Such educators may find that asking students to write about difficult social issues will evoke reflection in ways that discussion alone does not or cannot. Educators might, in fact, engage in a “pedagogy of discomfort”—asking each student to address his or her own biases and prejudices and disturbing students’ understanding of the culture of medicine.⁴¹ This pedagogy of discomfort contributes to reflective practice as a collective rather than an individual process, one that always gestures toward the often-disenfranchised “other.”

Mentoring students out of their comfort zones, toward some degree of “fearlessness,” as two of us have described elsewhere,⁴² can mitigate the tendency toward silence and capitulation so common among medical students when they become immersed in clinical settings. In addition, engaging students in critical inquiry can reinforce their sense of agency—not only as they develop their own professional identities but also as they become aware of their own particular influence on how care is delivered and how caregiving is taught in the clinical educational culture.

Regardless of which orientation to writing—expressivist, critical/cultural studies, or a blend of the two—medical educators adopt, they must also consider whether or not any particular assignment offers real opportunities for reflection as we have conceived it in this article. Some assignments ask for mere description or a brief synopsis of a clinical event; others focus on specific narrative elements such as point of view; still others elicit creative responses to any number of phenomena found in medicine. All are useful and meaningful to students’ personal and professional development, but when students are asked to write reflectively, they are really being asked to do more than each of these. Reflective writing should require students

- to consider and “work out” an issue, experience, or perplexity,
- to bring together *previous* experiences or knowledge in order to make sense of the perplexity,

- to elucidate the experience with *new* knowledge and imaginative renderings, and
- to speculate and wonder about the meanings and implications of the experience and to consider how they might use these understandings in the future.

Moreover, the writing that educators ask students to do must be part of a larger reflective pursuit involving the community; that is, if students are asked to do reflective work, we, their educators, must be willing to engage with them in significant ways regarding that work. Mann and colleagues²⁴ review consistently found that mentors are “key to reflection and are factors that learners perceived to be beneficial.” Similarly, Wald and colleagues²⁵ eloquently described faculty as “seasoned travelers” who foster students’ reflective processes in their responses to students’ writing.

Responding to Reflective Writing

As extraordinarily gifted and practiced learners, medical students spend the vast majority of their time gathering new knowledge and honing new skills. Opportunities for them to exhibit what and how much they have learned are ubiquitous throughout medical education and beyond, as they encounter evaluation, assessment, and measurement at every turn. Moreover, though rarely spoken aloud, the dictum, “If it can’t be measured, then it’s not worth teaching,” seems to guide medical curriculum development. Thus, educators face an overwhelming cultural expectation to evaluate *everything*, even those things not amenable to ever-expanding rubrics and metrics with tick boxes.

When we ask our medical students to write reflectively in medical education, we, their educators, seem to forget—as evidenced by how often we succumb to the temptation to address poor organization and grammatical errors—that we are not teaching those skills *per se*. Nonetheless, we still must take into account the degree to which students meet the requirements of an assignment. Therefore, the best reflective writing assignments offer students opportunities to express and explore what has been dogging or haunting or inspiring them by

providing a framework and guidance for such exploration.

When an educator asks students to write as part of a larger, ongoing reflective project, he or she is asking them to share something about themselves as emerging physicians that they might not have shared otherwise. Doubt, hesitation, confusion, or surprise are often given voice in an essay, which may originate from a response to a film or short story, a recollection of a patient encounter, or the retelling of an incident at the hospital (using an expressivist mode). The essay or a text may also be prompted by a more guided inquiry to examine a moral dilemma or analyze injustice (arising from a critical/cultural studies mode). As part of the meaning making that true reflection entails, reflective writing assignments should not end with summative evaluations or ticked boxes that offer little more than “the essay did or did not follow the format, use *x* or *y* elements correctly, or adhere to assigned parameters.” Whereas the actual composing of the essay and the experience or issue that inspired it may be private events, *reflection*—if it is to be a fuller, more robust process in medical education—involves the coconstruction of meanings. It is a “function of community and discourse,”⁴³ involving communication with others rather than the assignment of a grade or score.

Wald and colleagues²⁵ description of a longitudinal “doctoring” course offers one example of this interpersonal, shared aspect of reflection and reflective writing; their course involves substantial writing on the part of students, and, in turn, faculty thoughtfully “provide in-depth, individualized feedback to the students, thus creating an interactive process.” In our own doctoring course, we (D.W., J.Z.) similarly engage with students using their writing as a vehicle to ask questions and as an opportunity to converse on a variety of issues. This back-and-forth process between student and teacher constitutes a way of “doing” reflection ourselves as we share with students not only our own various experiences and accumulated wisdom but also our own incompleteness and inquiry. We e-mail students our musings on what they wrote, we pose questions to them using “track changes,” or we write longhand comments in the margins. Their essays then build on previous writing, on the private

comments and queries we share, and on the unfinished and ongoing discussions we have in our face-to-face, small-group sessions. Maxine Greene⁴⁴ describes what we are working toward:

Each time [we are] with others—in dialogue, in teaching-learning situations, in mutual pursuit of a project—additional new perspectives open; language opens possibilities of seeing, hearing, understanding. Multiple interpretations constitute multiple realities; the “common” itself becomes multiplex and endlessly challenging, as each person reaches out from his or her own ground toward what might be, should be, is not yet.

Evaluation, at least in its traditional sense of measuring quantifiable outcomes and assigning numeric scores, is absent here, yet we are not without expectations: a clear timetable regarding when students should post their writing and an understanding that they write with thoughtful openness regarding the issues posed. We pledge the same as we try to make sense of our lived worlds in the intersubjective margins of students’ writing, in our responses to their writing, and in the classrooms where we gather.

Conclusions and Recommendations

We, and many others, have argued that reflection and reflective writing are important practices in the development of caring and capable physicians. Here, we further argue for the importance of greater clarity, among faculty and with students, about what reflection is—and what it is not. In keeping with our goal for greater clarity, we suggest that for the purposes of medical education, reflection by our students should include a number of elements. First, it should involve some degree of *elaboration* and/or *interrogation* of their experiences. Second, reflection should be purposeful, requiring both a degree of *puzzling over* and an attempt at *puzzle solving*. Third, reflection should ideally be aimed at processing, at promoting broader understanding and *transformed thinking*, through which students derive a deeper sense of meaning. Through such transformed thinking, students may be led to *transformed action*, so that they approach subsequent experiences in new and enlightened ways. Finally, reflective work requires engagement with others, to

allow exchange of viewpoints, sharing of responses, and growth in *community*.

Importantly, we resist using this list of elements as a move toward a new checklist for competency-based assessment of student work. Rather, we propose using this description as a means of developing a common language for the medical education community (both faculty and students), as a forum for broader conversations about experiences in academic medicine, and as a guide toward achieving the optimal benefits of reflection for those who engage in it.

More concretely, we suggest that reflective writing assignments in medical education direct students’ attention to the value of the writing process itself, help foster students’ professional identity development, and engage multiple orientations, including the expressivist and critical/cultural studies approaches. To help achieve these objectives, we offer a set of guidelines. Because there is no one-size-fits-all approach to achieving reflection, and because medical education comprises so many varied settings, formats, and structures, we have purposively structured these guidelines to allow a fair bit of adaptation by educators. **Medical educators who want students to reflect should guide students to**

- **Carve out time.** Taking the time to work through an experience that breaks in some way with the expected course of things allows students to return to and begin to make sense of that which troubles or delights them. Writing mediates this sort of reflection. The formal and even aesthetic preoccupation of arranging words on a page provides a buffer allowing students to tolerate discomfort in order to process an issue.
- **Commit to new viewpoints.** Recalling and replaying an experience imaginatively allows students to set forth points of view that are alternative or even antithetical to their own. Through responses from instructors and peers, students engage in the “co-construction of meanings.” Interacting to co-create meaning serves as a model for patient-centered practice, for interdisciplinary approaches in the clinic, and for understanding the

wide variety of perspectives in ethical dilemmas.

- **Include intuitive and emotionally guided reasoning as well as logic.** Reflective writing, even if it occurs within the context of formal instruction in medicine, allows for emotional reasoning as well as sociocultural analysis.
- **Emphasize changes in understanding and action.** A renewed desire and deepened commitment lead to doing something differently the next time or acting when one previously failed to act.

Reflective work is imperative for medical students because they must attend to how they are becoming physicians. Reflection will make them better at such attending and will provide them with more control over the professional identities they develop. Educators must frame the importance of reflection in broadening students’ understanding not only of how the culture of medicine and, more important, the care delivered in that culture, takes shape, but also of how the students themselves can influence or redirect care to align with the best interests of those being served and those learning to so serve.

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