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“Where Does the Circle End?": Representation as a Critical Aspect of Reflection in Teaching Social and Behavioral Sciences in Medicine

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Abstract

Objective—This paper describes a reflective learning program within a larger curriculum on behavioral and social science that makes use of close reading, written representation of experience, discussion, and textual response. This response may in turn lead to further reflection, representation, and response in a circular pattern. A unique feature of this program is that it pays attention to the representation itself as the pivotal activity within reflective learning. Using the narrative methods that are the hallmark of this program, faculty writings were analyzed to characterize the essential benefits that derive from these practices.

Methods—In the context of a faculty development seminar on the teaching of behavioral and social sciences in medical curricula, a group of fifteen faculty members wrote brief narratives of reflective learning experiences in which they had made use of the methods described above. Their responses were submitted to iterative close reading and discussion, and potential themes were identified.

Results—Four themes emerged: writing as attention to self, writing as attention to other, writing as reader/writer contract, and writing as discovery. In each instance, writing provides a new or deepened perspective, and in each case the dividends for the writer are amplified by the narrative skills of those who read, listen, and respond.

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Conclusions—The narrative pedagogy described and modeled herein provides a potentially promising approach to teaching the social, cultural, behavioral, and interpersonal aspects of medical education and practice. Future research will deepen our understanding of the benefits and limitations of this pedagogy and expand our appreciation of its applications.

Keywords

Medical Students; Behavioral Sciences; Teaching Methods

*The poet's eye, in a fine frenzy rolling
Doth glance from heaven to earth, from earth to heaven;
And as imagination bodies forth
The forms of things unknown, the poet's pen
Turns them into shapes and gives to airy nothing
A local habitation and a name.*

—William Shakespeare, A Midsummer Night's Dream, Act V, Scene I

The practice of systematic reflection on experience has been increasingly appreciated as fundamental to the development of expertise among professionals in general and physicians in particular [1–5]. Elements of the ACGME core competencies and milestones and AAMC's Physician Competency Reference Set (PCRS) learning goals—such as practice-based learning, professionalism, and self-awareness—require physicians and trainees to reflect upon and analyze practice experience with the goals of life-long learning and systematic improvement [6, 7]. As health care becomes more and more marked by social, behavioral, and existential dimensions like social determinants of health and spiritual beliefs about death, physicians need to develop skills to discern, weigh, recognize, and respect multiple perspectives, including but not limited to their own.

There are many dimensions and stages of reflection. At its most basic, self-reflection involves the stepping back from a particular experience, either in the moment or later on, in order to increase understanding of and/or ability to cope with unexpected circumstances [2,3,8, 9]. The term “reflection” suggests that this process provides the ability to view one's actions and inner experience in ways that would otherwise be impossible, just as a mirror reflects back an otherwise unviewable image of the self. As powerful a tool as self-reflection is for learning from experience, one is still limited by the subjectivity of our experience, essentially still viewing it from the inside. At this level, reflection remains a behavioral and internally interpretive move, reminding an individual person to “stop and think” about his or her own action while seeking, internally, clues to its meanings.

Among the many approaches to reflection that transcend this subjectivity, each making use of a different sort of mirror, two are of particular relevance to our teaching of social and behavioral sciences to medical students. The first, widespread among medical school curricula, both formal and informal, is group reflection, i.e. discussion of one's self-reflection with others, allowing one to view one's experiences mirrored in others' eyes, providing confirmation of or counterpoint to one's original reflection [10–12]. The enhanced ability to view clinical encounters from multiple perspectives that group reflection engenders is fundamental to the “habit of humanism” that we regard as the ultimate goal of

reflective practice [13]. By introducing others into the process of reflection, it is transformed from an internal process to a relational one.

The second and, in medical school curricula, more novel solution to the problem of subjectivity is the representation of experience, most often in writing, but also possible in visual or aural media. In representing our experiences, we objectify them [14–17]. In Shakespeare's words, the representation of experiences “turns them into shapes and gives to airy nothing a local habitation and a name.” Representation allows us as writers to examine the form as well as the content of what has been represented such that the representations themselves become mirrors of our subjective experience. This allows us to act as witnesses to our own experience, providing us with an alternative to our conscious internal narrative from which we may learn [18–19].

Many models have arisen for inclusion of writing in medical education. The field called Medical Humanities has provided conceptual frameworks and pedagogic methods to support the inclusion of the humanities, including creative and reflective writing, in medical education (20–22). Some models for writing in medical education incorporate group discussion into the writing [23–27]. Some clinical writing practices focus on writing about critical incidents, lapses in professionalism, or interaction with standardized or actual patients; students are sometimes asked to respond to questions related to clinical courses or specific incidents in their medical school experience [28–32]. Several rubrics or templates have been advanced—one by three co-authors of this paper—to systematize faculty's responses to students' writing and to focus faculty's assessments of students' written reflections [27, 33]. Some groups endorse the rating or grading of students' reflective writing, while others propose that careful reading with individual response is a more productive approach to evaluation [34, 35].

Based on many of these foundational studies, we have developed a teaching program that makes use of close reading (i.e. reading and interpretation with attention to individual words, syntax, and other textual elements), representation, discussion, and textual response in our own and our students' professional development. We study the representation itself as the pivotal activity within reflective learning, treating our learners' writing as creative products to be read as seriously as one would read a literary text [35–41]. Rigorous textual examination of the writing itself can help writers to discover what they tell themselves—often unawares—in the very forms of their own writing [42].

METHODS

At the Columbia University College of Physicians and Surgeons, faculty members from departments of family medicine, medicine, pediatrics, psychiatry, and surgery teach a medical school “doctoring” course, called Foundations of Clinical Medicine (FCM). Taught in all four years of medical school, the course includes an effort to cultivate students' reflective practice through a creative writing process of representation. We learned early in our pedagogic practice that our effectiveness in teaching reflective practice was proportional to our own capacity for reflection, and so our commitment as teachers includes our commitment as learners. More specifically, since we have chosen teaching methods using

representation, we have had to learn to write creatively, to read closely what others write, and to appreciate the lessons learned by virtue of the work of representation.

This essay reports the findings of a participatory research project undertaken by this teaching faculty. Participatory research has become a familiar method in public health and community health research, when stakeholders like patients and community dwellers are the ones to pose the research questions about their own health situations and participate, with methodological guidance, in the collecting of data and its analysis [43–45]. Here, we teacher-researchers pose and collaboratively try to answer questions that have arisen within our own pedagogic practice. This means that the researchers asking the questions are the subjects who are being studied by the research, guided by members of the group trained in educational research methods.

Our teaching methods have become “participatory” in another way. Our practice is to meet for 90 minutes every week in our Faculty Development Seminar to prepare for teaching small groups of medical students in the doctoring course [45]. We do the reflective exercises ourselves that we are to ask our students to do. In effect, we have become the “laboratory” or pilot for what we eventually ask our students to do in the classroom. As a result, we gradually have become, together, a learning community whose growth parallels the growth we hope to elicit in our students. An unexpected result of our emerging methods is that the hierarchical distance between student and teacher has diminished, for all are embarked on the same quest for honest reflection and accurate perception of the situations of health care.

Pedagogic Methods

The most direct way to describe the pedagogic methods used for both faculty development and student teaching is to describe a particular teaching session. The following class took place among the FCM faculty as they prepared to use a text in a first-year medical student class the following week. About 15 faculty members sit in a circle in a classroom. We know one another well, not only as clinical colleagues but as writers and readers.

We were pilot-testing a text for possible use in our first-year medical school course. We wanted to encourage reflection among our students about the nature of care within the teaching hospital. We chose a paragraph written by a fiction-writer, one of our teaching colleagues, who had witnessed attending rounds at a Columbia teaching hospital and written a description of what she saw:

As soon as I entered that room I was filled up with care, care filled me, care filled the room. The power of that was undeniable and intoxicating. There was nothing but care in that room for those few minutes, that man in that bed with those sweet eyes looking at [attending physicians] R and D---and asking for care, receiving care from everyone in that room. Perhaps it would be different if his face were different, if he had not seemed so terribly sad and resigned. But the meaning there, the meaning conveyed in the whole experience, the story told to us just before we met him, and then the meeting, and then R tenderly touching his swollen leg, tenderly pulling up and back the sheet to cover it, tenderly touching him on the stomach, because he is human and she is the doctor and she is allowed, and he allows her...

the *meaning* here was just staggering.... Such an imperfect exercise---I am overwhelmed by the mysteries in this *one man's* case, I can't imagine how doctors ever have a sense of what's right---and yet so perfect, in its way, because caring for each other as best we can is as perfect as we can get" [46].

One person read the text aloud, and the group discussed the text in detail. The facilitator then offered a writing prompt, chosen to promote reflection not necessarily in response to the text, but subtly influenced by, or written "in the shadow of" the text. The prompt was: "Write about witnessing meaning." We decided to take 4 minutes to write, and each wrote silently. After four minutes, the facilitator asked for general responses to the writing (Was this hard or easy? Did something come to you right away to write about?) Several persons volunteer to read aloud what they've just written.

A psychiatrist offered to read aloud what he had just written. B is the writer's partner. O, T, and M are B's relatives:

B and I were among the first to arrive, pulling into the parking lot next to O and T on that dreary October morning. B's parents arrived soon thereafter, and other friends and family came in dribs and drabs. M was Orthodox and so the funeral had to happen soon after she died. Once all had arrived, we stood around the grave as the Rabbi spoke, and they lowered the pine box into the ground. And we shoveled dirt on top of her, each of us in turn, the first shovelful with the shovel upside down, the rest in the normal fashion. We who had known her well or not so well, loved her dearly or not, were there to bury her, leaving her secure before we walked away.

After the writer read his paragraph aloud, members of the group commented on what they had heard. We have trained ourselves to make textual comments on the writing after it is read aloud. We have found that concrete observations about the writing itself—the images, the mood, the temporal structure, the genre—expand a conversation about what the writer might have been "after" more predictably than opinion, judgment, personal taste, or sympathy. Our goal here is to help the writer to see what he or she has exposed by virtue of the writing and not to mimic a therapy group, a support group, or a confessional setting.

Members of the circle commented on the story about the burial. The author recalls these comments in particular in his description of what happened next:

As always [upon hearing the prompt], my head spun. I was in free fall. And I landed at the burial of B's Aunt M just a few weeks back. The time for writing was short, as always, and I'm a slow writer, so I couldn't get that much down. I kind of liked what I'd written, though, and I wanted to read. And I was rewarded. First, N pointed out to me that the word "secure" was very powerful. And C noted that the word "meaning" never explicitly appeared; I had entirely suppressed it. R's response was that the many particulars in the first sentences of the writing gave way to an unexpected emotional plunge at the end. All of this told me something—I hadn't actually faced the meaning of this event for me. And that meaning was pretty much conveyed in one single word: secure. Death as a kind of untethering, a terrifying free fall. And our loved ones, or just any other human being who happens

to be there, doing us the great kindness, the essential human gesture of solidarity, returning us to the earth where we belong.

The writer, in his representation, revisits a past event, one he admits he had not thought through thoroughly. Within the seamless process of writing, of choosing to share the writing, and of hearing his listeners' comments, he accomplishes something he would not have accomplished without writing and sharing [47]. The writer's colleagues revealed aspects of his own writing to him that he had not appreciated. His dividends are proportional, to some extent, to the readerly skills of those who listen to what he reads. Writing becomes an act not of reporting or recording but of discovery, even of action. As Henry James says in the Preface to *The Golden Bowl*, "To put things is exactly and responsibly and interminably to do them" [48].

Analytic Methods

This same group of faculty members conceived of a method of inquiry that would illuminate aspects of their emerging pedagogic practice. They were curious about the breadth of their own use of representation in their medical pedagogy. They wanted to catalogue the contexts in which they asked their students to write creatively and to describe what happened as a consequence. They were actively wrestling with questions of the relationship between reflection and representation and sought evidence from their own practices to help them understand their path.

As a group, they embarked on a hypothesis-generating activity to explore the emergent phenomena in which they participated. Using their own methods for discovery, they decided to write to a prompt regarding their pedagogy of representation, to collect the written responses, and to submit what was written to close reading and identification of potential themes. Here is the prompt they chose: "Write about a time when you asked learners to write or otherwise represent their experience. What did they learn by writing that they might not otherwise have learned?"

Fifteen faculty members present at the Faculty Development Seminar for teachers of the doctoring course on October 13, 2013 participated in this inquiry. They wrote with animation to this prompt. Mirroring the teaching/learning methods about which they had written, many read aloud, receiving responses from their peer-faculty members that opened up into consequential discussion of the situations described. The responses included descriptions of classes with first-year medical students, writing prompts offered at morning report on an in-patient teaching service, on-going faculty-level narrative medicine seminars, and peer teaching to faculty at international continuing education conferences. The strength and freshness of the faculty's writing impressed the group listening to these texts being read aloud and then the subset of authors who read the texts closely.

Three members of the seminar (MJD, BR, RC), all with training and experience in pedagogic or qualitative research, collected the written responses and submitted them to iterative close reading, identifying major themes that emerged from the texts. One of the readers (BR) is not a member of the teaching faculty but rather a consultant from the educational research center at the medical center. The other two readers (RC and MJD) are

PI and investigator on the NIH grant that supports the Faculty Development Seminar. The readers approached the texts themselves as the source of themes and relied on a close reading of what the faculty wrote to generate the list of themes that emerged from the writing itself. A consensual process of reconciling differences in individual theme lists led to an agreed-upon set of themes [49, 50]. They then chose texts within each theme that reflected central aspects of the theme to reproduce in this paper. They approached the writers of these examples to read all selected texts and to make detailed comments on them all. These comments were then incorporated into the discussion that follows.

RESULTS

The themes that emerged consensually in the iterative reading were as follows:

- Writing as attention to self
- Writing as attention to other
- Writing as reader/writer contract
- Writing as discovery

We will discuss each theme in turn with one or two examples of faculty writing that explore that theme. We remind our readers that we are not here seeking evidence of what the students learned from these pedagogic practices. That is material for another study underway. We here restrict ourselves to what the faculty learned through their efforts to represent their own pedagogy of reflection in the effort to better perceive how they themselves are teaching. We also emphasize that the identified themes are the result of a preliminary hypothesis-generating activity and should not be regarded as in any way conclusive.

Writing as attention to self

A general pediatrician wrote about a first-year medical school small group session in which students read a few paragraphs from the opening of Michael Ondaatje's novel *The English Patient* and wrote in response to the writing prompt, "Write about a room of care." She wrote:

There is one young student who is particularly shy and reserved... The student wrote two paragraphs. In the first, he described what a room of care should be. The mood was warm and he included color and emotion. The sentences were flowing. For his second paragraph, he made an abrupt change, starting his first sentence with "obviously" and using third person and formal language that sounded like it came from a brochure, described what "rooms of care" are actually like: "cold, efficient, institutional."

When I pointed this change in language and affect out to the student, and wondered with him what it meant, we hypothesized that this may have been representative of an internal conflict within him. At this, a broad smile spread over his face and he has been much more visibly engaged and talkative since that time.

This student underwent a recognition of self through the act of writing about a text, with the interpretive contribution of his teacher. The comments the teacher makes in response to the student's writing are formal ones—not about the content of the writing but about its grammar, diction, and mood. Together, student and teacher seem to move toward understanding what the formal shifts in the writing might mean. Through this experience, the student becomes a more active participant in the group, enriching the group's learning by sharing his perspectives. Overall, the student seems to have experienced a fresh way of looking at or even seeing himself.

Writing as attention to other

Another pediatrician wrote about his small group of first year students in the doctoring course. They had just read together "The Artist," a poem by William Carlos Williams, himself a towering American poet and a family physician, and then written to a prompt, "Write about a moment of unexpected beauty."

I had already been hesitant in using this poem for the group and wasn't sure how my students would react. However, in the discussion the students seemed engaged, and were quite curious about different aspects of the poem. When asked to write, most of them seemed to write voraciously, which was rather unexpected for me. I asked for volunteers to read out their writings. A student read her piece in which a partner of hers displayed unexpected generosity towards a homeless man while she was on a date with him. She seemed so moved by it. And the rest of us, hearing her story, were moved too.

Here, the pediatrician represents his student who is able, by her writing, to demonstrate a doubled form of heightened attention—the attention her partner bestows on the homeless man and the attention she bestows on her partner. In turn, this doubled attention opens the class of students up to one another, grateful that the student-writer showed how she was moved by the experience and, in turn, feeling collectively moved themselves. Meanwhile, the teacher-writer attests to the recognitions going on in the classroom while staging his own self-recognition as educator weighing teaching options, experiencing uncertainties and anxieties in the teaching role, and then joining in the "rest of us, hearing her story, [who] were moved too." The session seems to level the teacher/student hierarchy while establishing a student's lived experience as worthy of deep respect and admiration. Indeed the moment of unexpected beauty in the poem is echoed in the unexpected beauty of the experience for the class and each of its members.

A family physician writes of an occasion of writing as attention to other during in-patient narrative medicine rounds in which she, along with her house staff ward team, together took part in a narrative writing exercise. The prompt was, "Write the story of your name."

As the attending, I shared with my residents and interns the traditional Hindu ritual used in developing my name and the lifelong burden my parents bestowed upon me of correcting every new person's attempt at pronouncing my name. Similarly, I learned about my new interns and residents, [people] I had known for years. In just 20 minutes, we had a deeper understanding of the backgrounds, beliefs, and experiences each of us brought to our care of patients. Now, when I see my first-

month interns on the wards on in the clinic and they say hello, pronouncing my name perfectly, it makes me smile and be thankful for the opportunity to work with them.

In this narrative, the writer describes the sense of joy and affiliation that comes with her recognizing in others their recognition of her, a complete circuit of recognition. The work of recognition, made possible by sharing brief written narratives, here transcends the individual to cross the social classes of ward medicine. Knowing that this group, the “ward team,” will suffer triumphs and defeats together, this nearing in recognition takes on social and cultural significance, an antidote to medicine’s tendency toward steep slopes of authority and distances from the top to the bottom of the power chain.

Writing as reader/writer contract

At times, particularly in the context of clinical observation or witnessing, the writing achieves a form of interpersonal contact, welcoming the writer and reader into genuine engagement. A general internist and ambulatory care clinic director hosts a first-year student on a clinical clerkship. The student has been observing this physician in her office seeing patients. The clerkship requires that the student write a description of a witnessed encounter that teaches something about the doctor-patient relationship. The student describes a particular office visit in which the internist was able to explain something complicated to a patient, who was most grateful.

In her reflection, the student noted the posture, the intention, the attention. She notices the space and the scene. She did not speak about the clinical except to acknowledge it as unnecessary in this exercise. I hope as her education becomes more clinical (as it inevitably will) she reads this essay and remembers the balance.

As a learner (because I am a learner in this process also, as the reader), it was enlightening to see in words what happens when I see patients. And it wasn’t a self-congratulatory feeling. It is just a palpable concrete presentation of what happens when a patient and I interact. Where does the circle end? The student as teacher, the teacher as learner, the writer as student, the teacher as student? This never happened before without the writing piece.

This short, complex text represents first a textual examination of the student’s writing—attention to space and gesture, attention to the interior state of motivation (“intention”) of the agents, and attention to the contact made between the physician and her patient. Then the general internist represents her own interior response to having been perceived. She seems to have felt the benefits of her student’s attention on her. Representation is exactly “a palpable concrete presentation of what happens.” With the phrase that gives us the title for this paper, “Where does the circle end?”, the writer points to the potency of writing and reading: this activity creates a contract, the reader/writer contract, that is unhampered by hierarchy or status. The reader and writer co-construct the narrative and its meaning, and both writing it and reading it are learning experiences. This observation holds for the reading of the student’s description by the teacher and, more radically, for the actual *doing* of the clinical interaction by the internist which, until witnessed and represented, cannot be seen by

the internist herself. The generative observation that “This never happened before without the writing piece” is fuel for our continued work together.

Writing as discovery

As learners become accustomed to writing as a means of knowing, they give themselves more generously to the spontaneity of writing to prompts. A group of first year medical students read the aforementioned poem, “The Artist” by William Carlos Williams. The preceptor, a child psychiatrist and poet, wrote this description of his small group class:

Enter WC Williams and The Artist. I warned them that this would be a change of pace. At first, I saw no smiles, except one and asked if anyone had been delighted by the poem. It was as if they needed permission to feel delight, and they all started chattering about it.... Then I gave the prompt, “Write about a moment of surprise.” They wrote. There being now only 10 minutes left, I asked who wanted to share. One woman said she had had trouble starting, then it dawned on her that she had many moments of negative surprises. Class discussed burying negative feelings. Then the former engineering student said he’d like to read something personal—and this was the first time any student truly shared a personal moment. He wrote about having decided to not know his girl friend’s work schedule so that coming home after class, he can be surprised when he finds her there, how he enjoys the “fluttering of his heart” as he’s letting himself in, hoping she’ll be there, and loving the moment he first sees her. The class was really touched by his story, particularly I think coming from him (perhaps the last person they would expect to share a personal detail) and the class discussion led to the necessity to make room in one’s life to allow oneself to be surprised.

Here, the student-writers find themselves writing something they did not know they would write or something others did not know they would write. Unlike writing to an outline, as one would do for an essay question or term paper, this assignment invites students to pay attention to what they know but that might lie outside of awareness. The woman writer thought she had no moments of surprise to write about and then tumbles into a series of not-so-good surprises. The former engineering student surprises his readers, and perhaps himself, in writing about and then divulging a very tender, private moment of exquisite feeling, not simply uncovering but creating meaning. As one who, like many medical students, is comfortable coming up with the “right” answer, he finds the courage to share not only something personal, but something not clearly right or wrong, the truth of which is inherently subjective. He is validated by his classmates who provide a kind of “corrective emotional experience” as an alternative to the often invalidating environment of the initial years of medical education [51]. The discovery experienced by each writer is compounded by the discoveries undergone by the class as a unit.

DISCUSSION

Narrative pedagogy as modeled in this paper provides an innovative avenue toward teaching the social, cultural, behavioral, and interpersonal aspects of medical education and practice. A narrative pedagogy that allows for creative discovery and that is based on rigorous textual

expertise can extend far beyond clinical lessons toward deep subjective, intersubjective, and societal recognitions of self and other. These, we believe, are the foundations of compassionate and effective health care.

Numerous metaphors appeared in the writing displayed here—the poet’s pen giving an airy nothing a local habitation, the mirror’s reflections of self, the circle’s unique geometric properties, the leveling of the steep slope of health care, and the completion of a circuit, allowing energy to flow. The circle metaphor is particularly compelling, and hence included in the title, because of the inherent circular and spiral nature of our represented experience at multiple levels. At one level, we describe the circle of the learner becoming teacher becoming learner. This circularity is enhanced by the participation of faculty, house staff, and students learning side by side with and from one another. At the same time, we imply the movement of influence—like ripples on water in when a pebble is dropped—as the circle of experience leads to reflection, which, through representation, sharing, and textual inspection become another experience ripe for further reflection.

Evaluation of such teaching approaches requires methods geared toward emergent phenomena that track natural consequences of the innovation as well as conventional pre- and post-intervention surveys and qualitative assessments of the events of teaching. Several studies have been accomplished to assess the nature of consequences of our narrative training programs [52–56]. The findings to date point to improved communication skills, capacity for interprofessional collaboration, development of the professional identity, increased perspectival vision, and pleasure as outcomes.

Our choice to provide textual response to learners’ writing instead of grading or rating the writing does not obviate the need for rigor; rather, this rigor is applied to the training of readers in perceiving, appreciating, and communicating that which every narrative conveys in its form as well as its content. Rigor is equally required in the training of students to represent their experience with honesty and skill, discover its meaning with openness and appreciation, and use what they have learned with commitment and generosity. It is of critical importance in developing and using this form of education that the skills of reflection, close reading, representation, and response are regarded as central to the development of excellent health care providers.

The limitations of the study stem from its implementation at a single institution using a convenience sample of faculty present at one session of the Faculty Development Seminar. The themes that emerged from the written texts analyzed here were influenced by the writing prompt chosen. Had we chose a different prompt, and had faculty provided a different mix of writings, perhaps we would have identified a different set of themes. In addition, several elements of our methods – e.g. participants performing thematic analysis, lack of coding, lack of confirmatory triangulation procedures – deviated from rigorous qualitative methodology. Nevertheless, based on our broader experience with these methods, these themes have a resonance and goodness of fit which gives us confidence that they are ones worthy of our attention and sharing in this form. However, they are neither definitive nor inclusive of all possible themes.

The next steps of this line of inquiry, already underway, are to systematically examine the writings that medical students and trainees produce in classes taught by this faculty. We will continue query both faculty members and students to widen the thematic categories for attention. Students' responses to their being assigned creative writing are being solicited and analyzed as well.

An overall summary and vision of what reflective writing accomplishes was provided in one of the written responses to our inquiry prompt ("Write about a time when you asked learners to write or otherwise represent their experience. What did they learn by writing that they might not otherwise have learned?"). One of the participating faculty, a general pediatrician, described the writing accomplished by his medical students on the pediatric clinical clerkship:

[The students' writing] demonstrates a heightened attention that is required due to writing and remembering—OR—Remembering and writing—rather than to just have to recall. The choice of what event one wants to explore might be the same whether or not some representation was involved—but the act of representation requires heightened attention, as an activity; [it] also produces a kind of muscle memory—somehow deepening and making memory itself an EXPERIENCE.

This pediatrician moves a step beyond the list of themes we identified in our hypothesis-generating activity—writing as attention to self, writing as attention to other, writing as reader/writer contract, and writing as discovery. He proposes that writing is also an experience, an actual form of action, as seen in the opening example of this paper, through which the writer is able to accomplish something that he or she otherwise would not do. Echoing philosopher John Dewey and psychoanalyst Hans Loewald in their work on representation, he helps us to see what writing demands, how it works, and what it yields in clinical training [57, 58].

The hope of this work is that the acts of caring for patients and teaching those who care for the sick become, for our faculty and students, an "experience" that, through disciplined and systematic writing, can receive the heightened attention necessary to remember, to muscally represent, and so to undergo.

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Implications for Academic Leaders

- Reflective learning plays a broad role in students' development of the knowledge, skills, and attitudes that define medical professionalism. It has a particular importance in educating physicians in the social and behavioral sciences.
- Reflective learning may benefit from the systematic use of representation, primarily via writing, and the collection of writings in a narrative portfolio.
- The large-scale implementation of a narrative portfolio program requires investment in faculty skill development and support for training of readers in perceiving, appreciating, and communicating that which narratives convey in their form as well as their content.

Implications for Educators

- The systematic use of close reading, representation, discussion and textual response may enhance the value of reflection in teaching and learning social and behavioral sciences in medicine.
- This form of teaching and learning creates parallel opportunities for faculty to teach and learn from one another even as they teach and learn from their students.
- Representing one's experience in writing (or other media) not only enhances the writer's attention to self and others, but creates further experience arising from reflection on and discussion of the text, and opportunities for further learning.