

Creating Reflective Space for Reflective and “Unreflective” Medical Students: Exploring Seminal Moments in a Large-Group Writing Session

Bruce H. Campbell, MD, Robert Treat, PhD, Benjamin Johnson, MD, and Arthur R. Derse, MD, JD

Abstract

Problem

Reflection is a critical skill for all physicians, but some busy medical students describe themselves as “unreflective.” The authors sought to provide all third-year medical students at the Medical College of Wisconsin (MCW) with opportunities to explore seminal clinical and personal moments through reflective writing during workshops on preparing a personal statement for the Electronic Residency Application Service.

Approach

The authors developed and facilitated semiannual 1.5- to 2-hour sessions (January and June) for MCW third-year medical students (about 200 per class), pairing information on personal statements with reflective writing and group reflection activities.

Students wrote reflectively but were not required to share their writing with peers or faculty. They discussed insights gleaned during the writing process in small groups and with the class. They completed pre- and postsession questions on an anonymous questionnaire.

Outcomes

Eight all-class sessions were held between January 2015 and June 2018. Students completed 1,139 of 1,600 questionnaires (completion rate of approximately 71%). They misperceived their peers' views of reflective activities. Twice as many students agreed their peers felt writing, reflective, and narrative exercises were a waste of time as they themselves did (39% vs 19%). While 42% entered the session

comfortable with creative writing, 57% were surprised by the amount, quality, and/or insight of their writing during the session and 77% agreed the session helped them think more clearly about clinical encounters. Students who believed reflective writing was a waste of time were more likely to believe their peers felt that also, and they were less likely to believe the session helped them reflect on clinical experiences. Most written comments were positive.

Next Steps

To expose students to narrative medicine techniques, the authors added a close-reading exercise and shortened the reflective writing activity in 2019, hoping this would better equip all students for their journeys.

Problem

Busy medical students who describe themselves as being “unreflective” are unlikely to spontaneously and creatively contemplate the existential stress, ambiguous emotions, brushes with mortality, and moral dilemmas of their initial clinical encounters. However, highly reflective students might independently pause to focus on these events, intentionally journaling, writing, or finding other outlets for creative expression. Medical educators

see reflection as a critical and necessary skill for all physicians,¹ and most U.S. medical schools assign reflective activities as required components of preclinical and clinical education. These curricular elements are often collected and assessed for evidence of reflective capacity and maturity, but students note that frequent, uncoordinated reflective activities can lead to “reflection fatigue.”² Consequently, students who adapt quickly can learn to create and submit appropriate responses, which may not result from actual reflective effort.³

We were seeking opportunities to provide reflective and narrative-based skill-building activities for all students at the Medical College of Wisconsin (MCW)—particularly those having their initial clinical encounters—when we were asked to create and run a workshop for the entire third-year class on creating a personal statement for the Electronic Residency Application Service (ERAS). We proposed linking a reflective activity to the workshop. We acknowledged that

reflective writing should be intensely personal, yet we also felt that there were advantages for the students in working with their peers.

Therefore, we designed a session in which students identify the seminal moments of their third year and explore them through a reflective writing exercise followed by meta-reflection (reflection on the reflective process) within a group of peers. We gathered questionnaire data before and after the session to help us better understand students' perceptions of writing, reflective, and narrative exercises in general and of this session in particular.

Approach

Beginning in 2014, MCW added 2 required intersession weeks to the third year as part of continuous professional development interspersed throughout the medical school curriculum. The first week-long intersession program is held in January (the midpoint of the academic year) and the second in June (as students

Please see the end of this article for information about the authors.

Correspondence should be addressed to Bruce H. Campbell, Department of Otolaryngology and Communication Sciences, Medical College of Wisconsin, 8701 W Watertown Plank Rd., Milwaukee, WI 53226; telephone: (414) 955-0831; email: bcampbell@mcw.edu; Twitter: @headmirror.

Acad Med. 2020;95:882–887.

First published online February 25, 2020

doi: 10.1097/ACM.00000000000003241

Copyright © 2020 by the Association of American Medical Colleges

Supplemental digital content for this article is available at <http://links.lww.com/ACADMED/A808>.

transition from the third to the fourth year). The intersession weeks encourage students to reconnect as a class and to engage in discussions on topics such as breaking bad news, conflicts of interest, diversity and inclusion, bioethics, end-of-life care, personal wellness, and residency preparedness.

We were invited to facilitate a Creating Your Personal Statement session based on our ongoing voluntary fourth-year Residency Application Personal Statement Writers Workshops.⁴ This new 1.5- to 2-hour session—first offered in 2015 and required for all third-year students as part of each intersession program—is detailed below and outlined in Chart 1. Although all students are expected to participate in the writing activities, they are explicitly told that the anonymous research questions we ask them to complete before and after the session are optional and that there is no expectation that they will either read their writing aloud or submit it at the end of the session.

The research portion of the project was approved by the MCW Institutional Review Board and endorsed by the senior associate dean for academic affairs.

Introduction to ERAS personal statements

Students sit in self-selected groups of up to 8 at tables in a room that is designed to hold the entire third-year class (approximately 200 students). The session begins with an introduction to personal statements, which summarizes information from the Internet, the literature, and our personal experience. Resources are shared in hard-copy format as well as electronically.

Warm-up writing: “Fun” writing exercise

After the introduction, students are asked to answer the first 5 questions on the session questionnaire using a 5-point scale (1 = strongly disagree to 5 = strongly agree; Table 1) and to set the questionnaire aside to complete at the end of the session. They are then guided through a “free write” of a simple, fun topic (writing continuously without editing, correcting, or rereading, and focusing on describing what “I saw” and “I did” more than what “I felt” and “I think”). Paper is provided and students

Chart 1

Outline for Creating Your Personal Statement (Reflective Writing) Session for Third-Year Students, Medical College of Wisconsin, 2015–2018

Timing and activity ^a	Details
Before the session	
Set up	Ideally, the room is set up with tables of no more than 8 students, with no limit to the number of tables.
Gather supplies	<ul style="list-style-type: none"> Print copies of the personalized writing prompts and the questionnaire if the facilitator intends to gather data. Gather blank paper, pens, etc.
Opening the session (10–15 minutes)	
Data gathering	Administer preactivity questionnaire, if any.
Introduction	Go over outline of session schedule and what students can expect.
Introduction to ERAS personal statements (10–20 minutes)	
Summary of information from the Internet and from personal experience	<ul style="list-style-type: none"> What are they? How do programs use them? Where do you begin? What is the most helpful advice from program directors? Writing by hand versus using a laptop? What are the pitfalls, and how do you avoid them?
“Fun” writing exercise (10–15 minutes)	
Explain objectives and ground rules	Ground rules: <ul style="list-style-type: none"> No one is ever required to read or discuss their writing, but the process of writing will be discussed. Be open to the process.
“Rules” for free writing	<ul style="list-style-type: none"> Write without stopping. Don’t edit. Don’t worry about spelling. Just keep going! Concentrate on descriptions, facts, events, and the story more than on reflection. Phrases that begin “I saw” and “I did” are preferred to phrases that begin “I felt” and “I think.”
Introduce “fun” prompts	Begin the essay with one of these prompts: <ul style="list-style-type: none"> “My very earliest childhood memory is...” “The craziest thing that happened to me as a teenager was...”
Timed writing	Free write for 5 minutes straight.
Small-group discussion	In small groups, discuss the process: <ul style="list-style-type: none"> How did you feel about the free writing? What did you learn?
Reflective writing exercise (30–45 minutes)	
Introduction of goals and review of ground rules for free writing	<ul style="list-style-type: none"> What have the last few months meant to you and your classmates? Remind students that this might end up as part of their personal statement. Reflective writing ground rules: <ul style="list-style-type: none"> The process of writing will be discussed, but students will never be asked to share what they write unless they choose to do so. Reflective writing objectives: <ul style="list-style-type: none"> Explore important clinical and educational experiences from the past few months. Begin or continue the process of writing a personal statement.
Creation of personalized prompts	Students fill in the personalized prompt sheet as the facilitator slowly goes through the list of potential topics. ^b

(Chart continues)

Chart 1

(Continued)

Timing and activity ^a	Details
Prompt selection	The facilitator asks students to review their lists of potential topics and choose 1 (or 2) to inspire their writing.
Timed writing	Free write for 20 minutes.
Small-group discussion	In small groups, discuss the writing process: <ul style="list-style-type: none"> • What did you learn? • Did this process teach you anything about your clinical experiences? • What surprised you about this approach? • What might you change as a result of this exercise?
Large-group discussion	Solicit comments and find points of common experience among the students.

Closing the session

(5–15 minutes)

Data gathering	Administer postactivity questionnaire, if any.
Resource listing	<ul style="list-style-type: none"> • Give students the opportunity to ask questions and make comments. • Leave students with information on campus-wide writing groups, creative opportunities, and how to receive additional help with writing personal statements.

^aThe amount of time for each activity varied, depending on the flow of the session and the time allotted (1.5–2 hours).

^bThe list of potential topics is provided as Supplemental Digital Appendix 1 at <http://links.lww.com/ACADMED/A808>.

are encouraged to write by hand, but many choose to work on their laptops instead. Once students choose their prompt, they write for 5 uninterrupted minutes. They are then invited to discuss the process with their tablemates. They are allowed to share the content of what they wrote if they choose, but they are encouraged to talk about the process of writing rather than the writing itself.

Reflective writing exercise

Next, the goals of the main reflective writing exercise are described (Chart 1) and students are reminded that they will never be asked to share what they have written with their peers or the faculty. The students are guided to create a series of potential writing prompts based on their clinical and nonclinical experiences over the prior months by jotting down 1 or 2 words in response to each of the scenarios listed in Supplemental Digital Appendix 1 (available at <http://links.lww.com/ACADMED/A808>).

After students work through the list of scenarios, they select 1 or 2 of the experiences to serve as the basis for a 20-minute free write, focusing on “show, don’t tell.” When the time is up, they review their writing and engage in small-group discussions. They are asked to focus on the insights and surprises that

occurred during the writing process. The small groups then share these insights with the entire class.

Wrap-up

At the end of the exercise, the students are reminded that the purpose of the session was to offer them an opportunity to reflect on their clinical rotations and patient care experiences. We suggest that what they wrote could end up as part of their personal statement. After a summary and a review of on-campus creative opportunities, the students are asked to complete the last 3 items on the questionnaire they were given at the beginning of the session (Table 1). Written comments are encouraged. The students leave their questionnaires behind but take their writing with them. Students who want extra help can speak directly with the faculty facilitating the session. Any student who feels traumatized by the experience is encouraged to talk to a faculty member or is directed to student mental health services.

Data analysis

The data from the questionnaires from the first 8 sessions (January 2015–June 2018) were entered into a Microsoft Excel for Office 365 database (Microsoft Corporation, Redmond, Washington). The data were analyzed with IBM SPSS

Statistics 24.0 (IBM, Armonk, New York) to calculate Spearman rho correlations, analysis of variance, and Mann–Whitney U-tests. Free-response comments were classified as being positive, negative, or suggestions.

Outcomes

MCW third-year students participating in the 8 Creating Your Personal Statement sessions held between January 2015 and June 2018 returned 1,139 anonymous questionnaires, representing a questionnaire completion rate of about 71%. (Each MCW class had approximately 200 students, and each student was assigned to participate twice, for a possible total of 1,600 questionnaires. We were unable to determine how many students either attended without completing a questionnaire or failed to attend as attendance was not taken.) On the 1,139 questionnaires that were turned in, valid responses varied from 1,115 to 1,125 per question (Table 1). Three hundred and thirty-eight (30%) of the questionnaires also included at least one additional written comment.

The data demonstrated that students misperceived how their peers viewed reflective activities. Twice as many students agreed or strongly agreed (hereafter agreed) that their peers felt writing, reflective, and narrative exercises were a waste of time as they themselves did (440/1,119 [39%] vs 209/1,115 [19%]).

Students also appeared to benefit from the exercise more than they anticipated. Only 472/1,125 (42%) came into the session agreeing that they were comfortable with creative writing, yet after the session, 634/1,118 (57%) agreed that they were surprised by the amount, quality, and/or insight of their writing during the session and 863/1,117 (77%) agreed that the session had helped them think more clearly about some of their clinical encounters. Most students (951/1,115 [85%]) believed that they had several encounters and experiences during their first months of clinical rotations that they would always remember.

Using Spearman correlations (Table 2), one of the strongest relationships we found was that students who reported taking more English or writing classes in

Table 1

Third-Year Student Responses to Pre- and Postsession Questions, Creating Your Personal Statement (Reflective Writing) Session, Medical College of Wisconsin, January 2015–June 2018

Question	Responses, no. ^a	Agree/strongly agree responses, no. (%)	Response, mean (SD) ^b
Pre-session			
1. I am comfortable with creative and reflective writing.	1,125	472 (42)	3.1 (1.1)
2. Compared with my medical school peers, I took more than the average number of English or writing courses in high school and college.	1,121	289 (26)	2.8 (1.1)
3. My medical school peers view writing, reflective, and narrative exercises as a waste of time.	1,119	440 (39)	3.2 (0.9)
4. In general, I view writing, reflective, and narrative exercises as a waste of time.	1,115	209 (19)	2.5 (1.0)
5. I had several encounters and experiences during my first year of clinical rotations that I will always remember.	1,115	951 (85)	4.2 (0.8)
Post-session			
6. I was surprised by the amount, quality, and/or insight of my writing during this session.	1,118	634 (57)	3.6 (0.9)
7. This session helped me think more clearly about some of my clinical encounters.	1,117	863 (77)	3.9 (0.8)
8. I am starting to think about what I might include in my residency application personal statement.	1,116	888 (80)	4.1 (0.9)

^aStudents submitted 1,139 questionnaires across 8 sessions (about 200 students/session). Not all questions were answered on all questionnaires.

^bResponses used a 5-point Likert-type scale: 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree.

high school and college than their peers were less likely to view writing, reflective, and narrative exercises as a waste of time; these students were also more comfortable with creative and reflective writing. Students who reported that the session helped them think clearly about clinical encounters were more likely than their peers to be surprised by the amount, quality, and/or insight of their writing. Students who reported that they were thinking about their upcoming personal statements were more likely than their peers to be surprised by the quality of their writing and to indicate that the session helped them think more clearly about some of their clinical encounters.

Weaker but still significant associations we found included that the students who reported taking more English or writing classes than their peers were more likely to believe that their peers

viewed writing, reflective, and narrative exercises as a waste of time. The students who were most comfortable with writing were more likely to have had several initial clinical encounters they believed they would always remember. Students who reported believing that they would always remember several of their initial clinical experiences were more likely to be surprised by the amount, quality, and/or insight of their writing, believe that the session helped them think more clearly about their clinical experiences, and be thinking about their personal statements.

Conversely, students who viewed reflective writing as a waste of time were more likely to believe that their peers felt the same way. In addition, they were more likely to believe that they took fewer English and writing classes than their peers; were less likely to believe they would always remember several of their

initial clinical encounters; were less likely to be surprised by the amount, quality, and/or insight of their writing; were less likely to believe that the session was useful in clearly thinking about clinical encounters; and were less likely to be thinking about their personal statements.

The only question that elicited different responses between the January (midyear) and June (end-of-third-year) sessions was question 8, “I am starting to think about what I might include in my residency application personal statement,” confirming that students were more likely to be thinking about their personal statements as the ERAS deadline approached. Mann–Whitney U-testing demonstrated that responses to all the other questions were stable between the sessions.

In 2018, we added a question asking students if they had done any reflective activity (writing or otherwise) during the third year. Of the 280 students who responded to this question, 105 (38%) reported some reflective or creative activity.

Written, anonymous comments gathered at the end of the sessions were supportive of continuing the reflective writing sessions (see Supplemental Digital Appendix 2 at <http://links.lww.com/ACADMED/A808>). Of the 338 comments received, 275 (81%) were positive (e.g., “Great session!” “Cool way to put thought into words”), 18 (5%) were negative (e.g., “Too long to write. Carpal tunnel.” “How could this be a positive experience?”), and 44 (13%) offered suggestions (e.g., “Say more about reflective or descriptive writing.” “Do this earlier in the year.”).

Potential limitations with this study include that (1) it was performed at only one campus using nonvalidated questionnaires, and (2) given the large sample size, some of the statistically significant associations might be unimportant.

Next Steps

Based on our review of the students’ written comments regarding the length of time they were asked to write, in 2019 we shortened the reflective writing portion of the sessions to 10 minutes, although we have yet to settle on the perfect duration for the free-writing exercises. We

Table 2

Spearman Correlations of Third-Year Student Responses to Pre- and Postsession Questions, Creating Your Personal Statement (Reflective Writing) Session, Medical College of Wisconsin, January 2015–June 2018^a

Variable	Correlation coefficient ^b (P value) ^c							
	1	2	3	4	5	6	7	8
1. I am comfortable with creative and reflective writing.	—	.411 (<i>< .001</i>)	-.018 (.539)	-.373 (<i>< .001</i>)	.127 (<i>< .001</i>)	-.001 (.967)	.056 (.064)	.041 (.179)
2. Compared with my medical school peers, I took more than the average number of English or writing courses in high school and college.			.099 (.001)	-.216 (<i>< .001</i>)	.034 (.262)	.008 (.783)	-.007 (.825)	-.012 (.696)
3. My medical school peers view writing, reflective, and narrative exercises as a waste of time.				.361 (<i>< .001</i>)	-.034 (.256)	-.030 (.322)	-.128 (<i>< .001</i>)	-.037 (.219)
4. In general, I view writing, reflective, and narrative exercises as a waste of time.					-.246 (<i>< .001</i>)	-.104 (.001)	-.255 (<i>< .001</i>)	-.157 (<i>< .001</i>)
5. I had several encounters and experiences during my first year of clinical rotations that I will always remember.						.100 (.001)	.251 (<i>< .001</i>)	.164 (<i>< .001</i>)
6. I was surprised by the amount, quality, and/or insight of my writing during this session.							.468 (<i>< .001</i>)	.307 (<i>< .001</i>)
7. This session helped me think more clearly about some of my clinical encounters.								.346 (<i>< .001</i>)
8. I am starting to think about what I might include in my residency application personal statement.								—

^aStudents submitted 1,139 questionnaires across 8 sessions (about 200 students/session). The numbers of responses to individual questions ranged from 1,115 to 1,125.

^bBold indicates correlation strength 0.30–0.49; italics indicate correlation strength 0.10–0.29. All other correlations are not statistically significant.

^cP values are 2-tailed; italics indicate statistical significance.

also replaced the warm-up “fun” writing exercise with a close-reading exercise^{5,6} to expose students to narrative medicine techniques: We read a short passage of fiction^{7,8} or an essay⁹ together, asked the students to engage in small-group discussions, and then had the students write to a prompt “in the shadow” of the reading. The rest of the session remained the same. Based on written comments, the close-reading experience was well received.

We continue to offer our peer-editing Residency Application Personal Statement Writers Workshops to the fourth-year students in the weeks before the ERAS submission deadline. The combination of these workshops offers each student multiple opportunities to work on their personal statements and, hopefully, engage in meaningful individual and group reflection.

We hope that each of our third-year sessions, incorporating reflective writing and close-reading activities in a group setting, offers students a private place to think and write about their experiences

while better understanding narrative moments in clinical settings. These sessions attempt to meet twin goals: Faculty hope that the students become more reflective, and the students have a desire to kick-start their personal statements. The timing is optimal since students are immersed in early, required clinical rotations while pondering their residency application personal statements. More data are needed to learn how this approach fits with the larger goal of equipping all medical students—reflective and unreflective, alike—for their journeys toward becoming caring, compassionate, competent, and insightful physicians.

Acknowledgments: The authors are grateful to the MCW intersession course directors, the senior associate dean for academic affairs, and the Robert D. and Patricia E. Kern Institute for the Transformation of Medical Education for support of narrative and reflective activities at the Medical College of Wisconsin. The authors also thank Kim Suhr, MFA, director of Red Oak Writing, Milwaukee, Wisconsin, for help with session design.

Funding/Support: None reported.

Other disclosures: None reported.

Ethical approval: Medical College of Wisconsin Institutional Review Board Protocol PRO00019988. Date of approval: 4/10/2013.

Previous presentations: Preliminary data were presented as a poster at the Medical College of Wisconsin Research Day, Milwaukee, Wisconsin, September 2015.

B.H. Campbell is professor of otolaryngology and communication sciences, Medical College of Wisconsin, Milwaukee, Wisconsin; ORCID: <https://orcid.org/0000-0001-9485-5728>.

R. Treat is associate professor of emergency medicine and director of measurement and evaluation, Office of Academic Affairs, Medical College of Wisconsin, Milwaukee, Wisconsin; ORCID: <https://orcid.org/0000-0003-2291-3858>.

B. Johnson is an otolaryngology resident, Wayne State University, Detroit, Michigan.

A.R. Derse is the Julia and David Uihlein Chair in Medical Humanities, professor of bioethics and emergency medicine, and director, Center for Bioethics and Medical Humanities, Medical College of Wisconsin, Milwaukee, Wisconsin.

References

- 1 Sandars J. The use of reflection in medical education: AMEE guide no. 44. *Med Teach.* 2009;31:685–695.
- 2 Trumbo SP. Reflection fatigue among medical students. *Acad Med.* 2017;92:433–434.

- 3 de la Croix A, Veen M. The reflection zombie: Problematizing the conceptual framework of reflection in medical education. *Perspect Med Educ*. 2018;7:394–400.
- 4 Campbell BH, Havas N, Derse AR, Holloway RL. Creating a residency application personal statement writers workshop: Fostering narrative, teamwork, and insight at a time of stress. *Acad Med*. 2016;91:371–375.
- 5 Charon R. Close reading: The signature method of narrative medicine. In: Charon R, DasGupta S, Hermann N, et al, eds. *The Principles and Practice of Narrative Medicine*. New York, NY: Oxford University Press; 2016:157–187.
- 6 Charon R, Hermann N, Devlin MJ. Close reading and creative writing in clinical education: Teaching attention, representation, and affiliation. *Acad Med*. 2016;91:345–350.
- 7 Bauby J-D. The diving bell and the butterfly (excerpt). In: Coles R, Testa R, eds. *A Life in Medicine: A Literary Anthology*. New York, NY: The New Press; 2003: 168–170.
- 8 Kincaid J. Girl. *The New Yorker*. <https://www.newyorker.com/magazine/1978/06/26/girl>. Published June 19, 1978. Accessed December 31, 2019.
- 9 Gribben V. Practicing medicine can be Grimm work. *The New York Times*. <https://www.nytimes.com/2011/07/01/opinion/01gribben.html>. Published June 30, 2011. Accessed December 2, 2019.