



## Drawing Prompts in Medical Education

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### ABSTRACT

This paper describes the development and use of brief 2-3 minute drawing prompts that have been successfully integrated into all phases of the medical school curriculum. The drawing prompts provide students with a way to express complex ideas visually, and are an effective way to introduce and discuss challenging topics through the medium of comics. They also serve as efficient ice-breakers, help students feel less isolated in their experience, and promote self-reflection and emotional awareness. Though there are some challenges to introducing such prompts into the curriculum, doing so can be fruitful for students and teachers alike.



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## INTRODUCTION

Since 2009, I have integrated comics into medical education at Penn State College of Medicine, primarily through an elective course for fourth-year students. In that course, students explore medically-themed graphic narratives, engage in creative exercises, and craft their own comics to reflect on formative experiences (Green, 2013). My research and publications have demonstrated that using comics in medical education is not only engaging and enjoyable, but also an effective way to foster key doctoring skills (Green, 2015).

The success of this course with self-selected, advanced students raised several questions: Can comics work with students who do not self-select to enroll in such a course? Are comics beneficial for students earlier in their training? Can comics be integrated into medical school classes designed for other purposes?

## APPROACH

To explore these questions, I developed brief drawing activities that I used in a variety of courses spread throughout the medical school curriculum, including (but not limited to) a group of students that I followed longitudinally, called the “comics cohort.” This initiative was buoyed by the presence of a robust humanities curriculum at Penn State College of Medicine, where opportunities exist to implement innovative teaching methods throughout the entire medical program. Unlike my elective course for fourth-year students, these activities were not part of a stand-alone Graphic Medicine course. Instead, they served as a way for students to incorporate comics-making into their learning while navigating the required curriculum. During the first and second year of medical school, I facilitated small group sessions in the following courses: Foundations of Health Humanities, Observation and Interpretation, Humanities in Context, and Communication. During the third year, I lead informal discussions that focused on the transition from the classroom to the clinic.

In each of the courses, I integrated comics into the class discussions using “drawing prompts” inspired by the teaching methods of Lynda Barry, MacArthur Fellow and professor at the University of Wisconsin. Having studied with Lynda during a sabbatical leave in the throes of the COVID pandemic, I adapted her “check-in card” approach to suit the medical school environment (Barry, 2013). Each drawing prompt, timed for 2-3 minutes, invited students to visually express ideas relevant to the session’s learning objectives using felt-tip markers and blank 4”x6” cards. The goal was to promote reflection, spark discussion, and empower students to convey complex ideas through images. The Human Subjects Protection Office at Penn State College of Medicine determined that the activities described in this paper did not require formal IRB review because they met the criteria for exempt research according to institutional policies and federal regulations.

Some prompts focused on self-awareness and emotional modulation. For example, to foster a sense of reflection and openness, I asked students to draw what was on their mind at that moment (see Figure 1). This exercise allowed them to check in with themselves (and one-another) and prepare for the session. Sharing these drawings encouraged vulnerability and presence.

# DRAW WHAT'S ON YOUR MIND

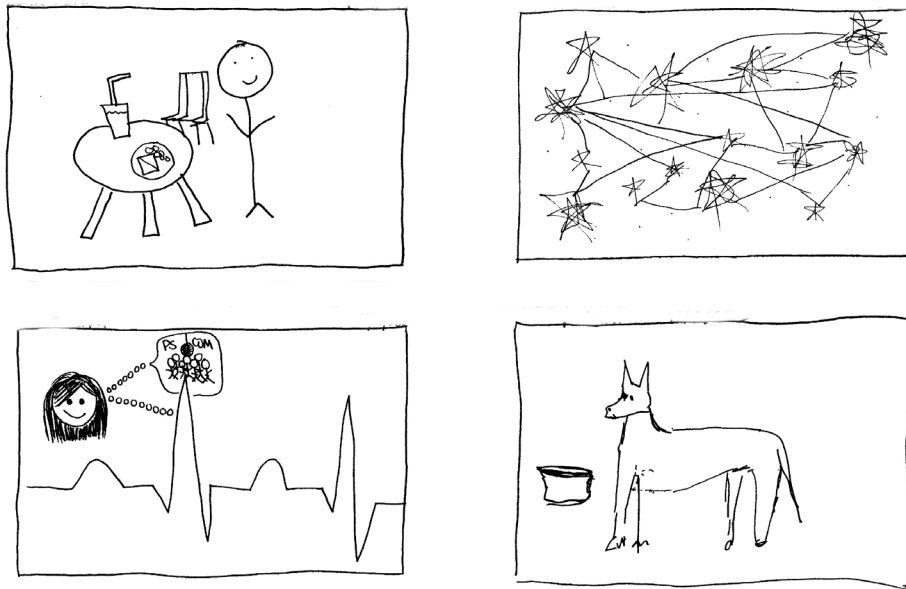


Figure 1

Other prompts targeted specific topics. In a session on the social construction of disability, students drew separate images on three cards: 1) a person with a disability, 2) something that makes the disability better, and 3) something that makes it worse (see Figure 2). Their drawings led to rich discussions on the meaning and nature of normality, the impact of stigmatization on people's lives, and how culture, environment, and economics influence the experience of disability.

## DRAW A DISABILITY DRAW SOMETHING THAT MAKES IT BETTER DRAW SOMETHING THAT MAKES IT WORSE

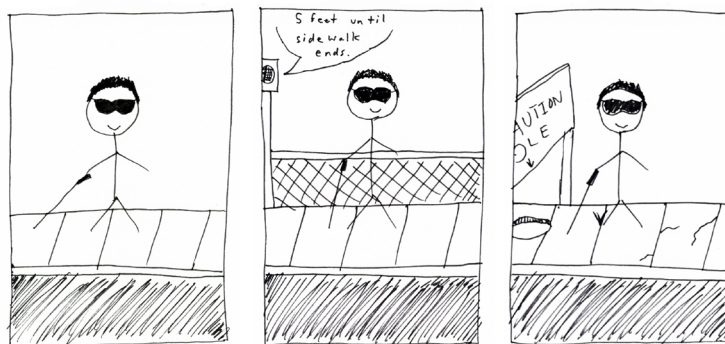


Figure 2

For a session on the topic of burnout, students were asked to create a scale representing the concept of burnout and to place themselves on it. Their drawings, ranging from simple emojis to more elaborate visual metaphors, offered deeper insights into their experiences with burnout than words alone could convey (see Figure 3).

### DRAW A BURNOUT SCALE (AND LOCATE YOURSELF WITHIN IT)

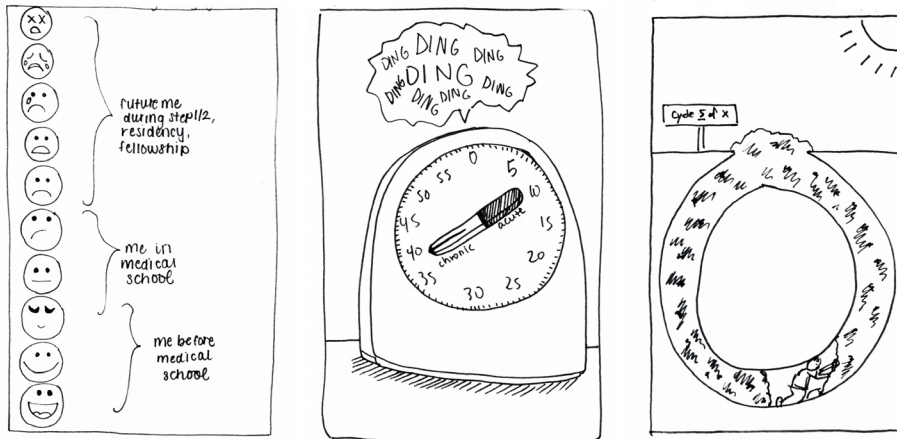


Figure 3

Similarly, for a session on unconscious bias, students were prompted to draw personal biases they had identified in themselves (see Figure 4). This exercise promoted honest conversations about interacting with people from diverse socioeconomic backgrounds, ages, mental capacities, ethnic groups, and even body types. By having students draw their bias and share with others, it helped them to feel less isolated in their struggles with bias, and also to brainstorm with peers about how they might minimize the impact of their biases when interacting with patients.

### DRAW YOUR UNCONSCIOUS BIAS (AND ITS IMPACT)

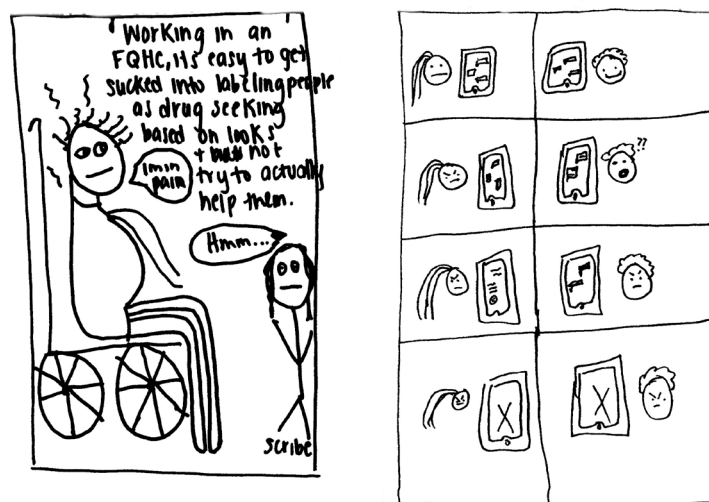


Figure 4

Developing keen observational skills is crucial for physicians, and during the Observation and Interpretation course, we used art to cultivate these skills. One activity involved carefully observing a projected painting for 60 seconds, followed by a three-minute memory-based drawing exercise (see Figure 5). The ensuing discussion helped students identify new ways to improve their attention to detail and to articulate what they saw to others.



Figure 5

To address the expectations placed on medical students, I asked them to draw their idea of the stereotypical “ideal medical student” using one ink color, then to overlay it with a more realistic version using another color. This exercise revealed a pervasive disconnect between expectations and reality, fostering solidarity among students (see Figure 6).

## DRAW AN IDEAL MEDICAL STUDENT DRAW A MORE REALISTIC VERSION

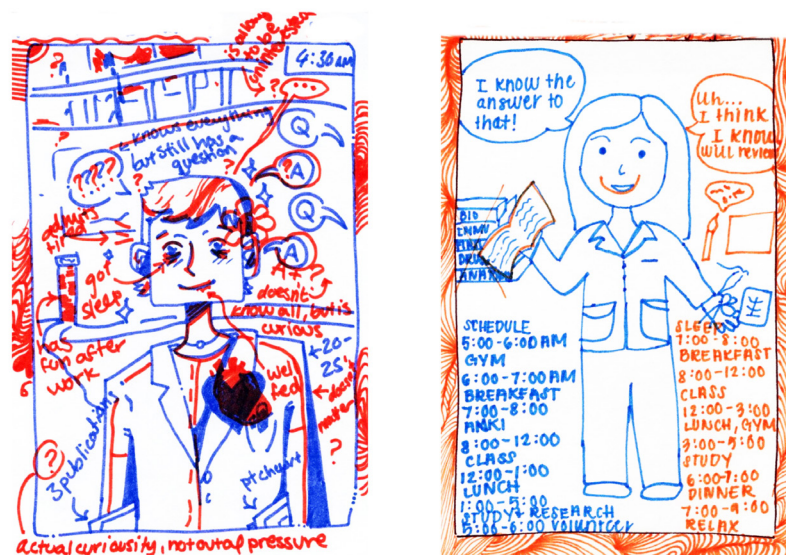


Figure 6



As students transitioned to clinical work during their third year, I led monthly seminars focused on self-reflection about their new roles and responsibilities. In this context, one drawing prompt asked students to depict a superpower they wished they had on clinical rotations. The results, ranging from knowledge consumption to time manipulation, allowed students to articulate the skills they needed most during this challenging period (see Figure 7).

## DRAW THE SUPERPOWER THAT WOULD BE MOST HELPFUL FOR CLINICAL ROTATIONS

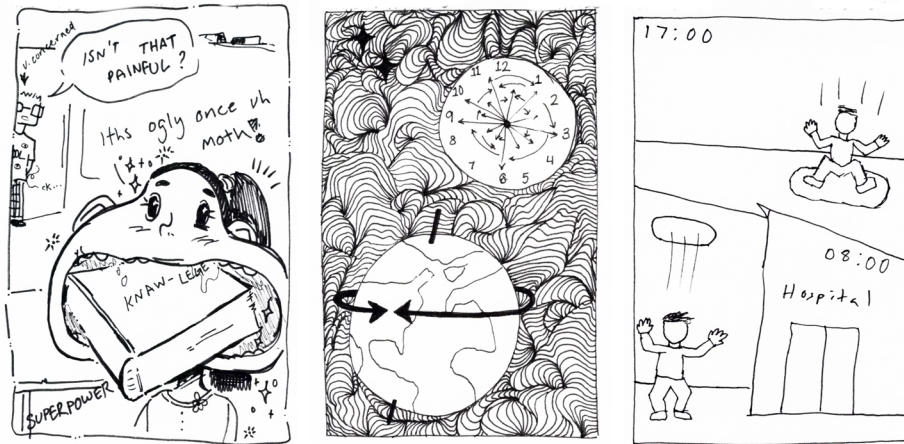


Figure 7

These examples represent just a fraction of the prompts I have developed over the years. After each discussion, I post the drawings on Padlet ([www.padlet.com](http://www.padlet.com)), where students can view and comment on each other's work. This sharing fosters further reflection and reduces feelings of isolation. As part of an ongoing qualitative research project (results forthcoming), interviews with students have yielded several insights about the drawing prompts:

### *"It Makes Me Feel Less Alone"*

"It gives you a chance to just slow down and chill... I like the check-in cards (drawing prompts) because it allows us to... ask how am I really feeling? Am I burnt out? How... am I going to show this to people? And then seeing other people's check-in cards reminds me that I'm not alone because sometimes I feel like I'm struggling, but... other people are also struggling. So, it makes me feel less... alone."

### *"You're Committing to Being Vulnerable"*

"With drawing, you're committing to what you're going to say because you can't just back out last minute like you can if [someone asks] how you're feeling [and you] can just say, 'oh, I'm doing okay.' But [with] drawing you're committing to being vulnerable, so that kind of helps us share more with each other because we're... forced to fully lean into how we're doing and saying how we're feeling."

### *"I'm Able to Share More"*

"I think I'm able to share more because when I'm focused on drawing, I don't really think about what

other people are going to say about me. I'm not being self-conscious about it. It's more just like my raw vulnerable self... like this is what I feel like... It's a lot easier to share... my inner feelings, [and it's] definitely a nice ice breaker."

## DISCUSSION

Integrating brief drawing prompts into small group discussions in medical school is feasible and popular, even among students who have not self-selected to enroll in an art-focused class. This is consistent with findings from other contexts such as engineering education, where drawing prompts have been shown to increase cognitive engagement and help students with conceptual understanding (Wu et al., 2020). In medical settings, brief art-based prompts have been successfully integrated into narrative medicine workshops, with researchers noting how doing so encouraged participants to express themselves using intuitive and sensorimotor processes, helped them tolerate uncertainty, and allowed for unanticipated self-discovery (Choe, 2023).

The use of drawing prompts in medical education augments traditional teaching in a variety of ways. First, students' drawings create a visual record of their thoughts and experiences, serving as a powerful tool for documenting professional growth and identity formation. Cruess and colleagues have argued that the acquisition of professional identity is the core goal of medical education; that is, students need to learn how to think, act, and feel like physicians (2014). Drawing prompts offer a method for eliciting unfiltered glimpses into that process.

Second, sharing these drawings fosters vulnerability and emotional awareness—qualities often absent from the formal curriculum and discouraged by the "hidden curriculum (Hojat et al., 2009)." Suppressing normal, albeit difficult, emotions can lead to burnout, a major issue in the health professions (Dyrbye et al., 2014). In this context, drawing and sharing serve as an emotional safeguard, helping students feel more connected and understood, a sentiment often expressed by participants.

Third, drawing provides an alternative mode of expression beyond writing or talking, allowing students to convey complex ideas—especially emotional ones—that are sometimes hard to articulate through words alone (Green & Myers, 2010).

Fourth, drawing prompts are effective icebreakers that are easy to implement in the classroom. They are quick, enjoyable, and generate visual artifacts that stimulate meaningful discussion. Students sometimes need reassurance that artistic ability is unnecessary for the task at hand; in fact, those who consider themselves "bad artists" often create the most compelling drawings, while more experienced artists may become self-conscious about the quality of their work. In this regard, it is worth noting that the final products of drawing prompts (ie. the images themselves) are not the primary value of this activity. Rather, drawing is a method of meaning-making—a way for students to think and to communicate— an idea that has been explored in some detail in the context of early childhood education (Papandreou, 2014).

## LIMITATIONS

Like any educational innovation, using drawing prompts comes with its challenges. First, instructors must help students overcome the "I can't draw" mindset, which is common among high-achieving adults and often stems from childhood experiences and internalized beliefs about artistic talent. I

dedicate substantial time to teaching students that a simple visual vocabulary—lines, curves, angles, circles, and dots—is all they need to communicate ideas effectively (Gregory, 2019).

A second challenge is gaining “buy-in” from course directors, especially when drawing prompts diverge from existing lesson plans. At Penn State College of Medicine, where the humanities are embraced, I have not found this to be much of a barrier. However, this could be more difficult in less supportive environments.

A third challenge lies in crafting drawing prompts that align with specific learning objectives. This requires practice, having a good sense of what works and what doesn’t, being able to think creatively, and a willingness to experiment and learn from failures.

## CONCLUSION

Comics can be successfully integrated into medical education through the use of brief, timed drawing prompts. The prompts work even when students do not self-select to draw. Because they take so little time to administer, drawing prompts can be incorporated into small group discussions that are designed for purposes other than comics-making. Using drawing prompts can help students process information, reflect on their own experiences and attitudes, and communicate with classmates in creative and meaningful ways. To the extent that medical education aims to help students think conceptually, reflect honestly about their evolving profession identities, and communicate more clearly, this approach can be a useful addition to medical school teaching.

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