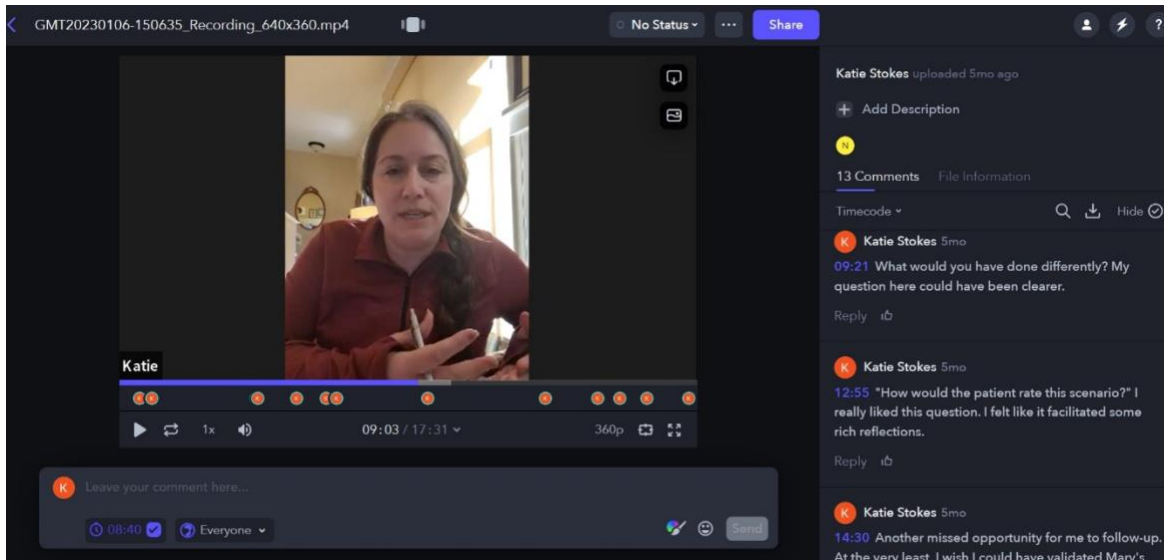


## A Personal Journey: Leveraging Technologies to Revolutionize Simulation Debriefing

By *Katie Stokes, MA, Interprofessional Advanced Fellow in Clinical Simulation, Durham VA Health Care System*



*Screenshot of Katie Stokes' recording of her zoom debrief that was uploaded into an annotation tool in which she performed a self-assessment. She can invite experts to quickly access her comments, linked to the video time, to provide further feedback.*

*Katie Stokes, a fellow through the VA Interprofessional Advanced Fellowship in Clinical Simulation (IAFCS), shares her journey in advancing the art of debriefing in clinical simulation. In this personal, firsthand article, learn about her experiences and discoveries as she leverages technology to enhance the learning process and finds innovative ways to educate future simulation educators.*

In the world of education, where my journey began over a decade ago, the role of an educator is multifaceted and demanding. Whether it's introducing iPods into high-school classrooms in the early 2000s or bringing innovative teaching techniques from seminars back to fellow educators, my passion to support and enhance the work of educators remains unwavering. My focus centers on streamlining processes, optimizing learning, and fostering innovation. This is a mission that only intensified when I embarked on the path to becoming a clinical simulation education expert.

I entered the IAFCS with a background in science education and crafting immersive educational experiences. During my fellowship year, I came to realize that debriefing plays an indispensable role in the learning process. Simultaneously, I found it to be one of the most challenging aspects of simulation education. This discovery motivated me to explore the potential of technology in facilitating the mastery of debriefing, not only by enhancing debriefing skills but also by addressing some of the limitations present in current debriefing methods for assessment and evaluation.

## Enhancing Debriefing Through Streaming and Annotation Tools

My background in working with game developers and graphic artists familiarized me with streaming and annotation tools. When it comes to education, streaming proves remarkably effective due to social learning theory, explanatory techniques, and observational learning. Annotation, particularly in the context of video annotation, enables collaboration between teams, offering feedback at specific points in a marketing video or game animation sequence. I decided to concentrate on these tools to elevate the assessment of simulation debriefing.

Streaming could serve as an educational tool for novices, enabling experts to record themselves as they watch a simulation and vocalize their thoughts when observing it. This includes the questions they come up with and the techniques they would employ during the debriefing. Experts can explain why they chose to focus on certain aspects, their intentions when asking particular questions, what they believe went well, and what they might have done differently. Learners, in turn, can observe the thought process of these experts, using it as a guide to develop their own techniques.

Annotations, on the other hand, allow experts to review debriefing videos and offer feedback via annotated comments linked to specific video content. Novice debriefers can swiftly correlate the expert's comments with their performance in the debriefing, thereby enhancing contextual feedback in their learning journey.

While leveraging technology for enhanced debriefing, I encountered initial obstacles linked to user comfort with technology and learner concerns about psychological safety. Once these challenges are addressed, technological applications could become a robust method for honing debriefing skills. The use of technology in debriefing is still in its early stages, yet it holds substantial potential for future development and advancement. This may include the utilization of artificial intelligence tools, which can generate debriefing questions or provide real-time feedback to learners about their question phrasing. Extensive experimentation and research are needed to further refine and optimally harness these technologies within the simulation environment.