



Supporting Future Biomedical Researchers via Online Evidence Synthesis Instruction

Robin O'Hanlon, MIS, MA, Celine Soudant, MS, MLIS, Johanna Goldberg, MSLIS, Leticia Mercado, MHA
Memorial Sloan Kettering Cancer Center



Background

The MSK Library partnered with educational programs (the MSK Medical Student Summer Fellowship Program and Summer Radiology Program) aimed at increasing representation of high school, undergraduate, and medical students from historically underrepresented groups in medicine. The MSK Library developed an online curriculum designed to address the needs of these young researchers, with a specific focus on evidence synthesis projects.

Description

Beginning in 2020, the MSK Library developed a series of instructional sessions focused on enhancing fundamental research skills among future biomedical researchers. Instructors emphasized the increased prevalence of evidence synthesis done by early career cancer researchers, while acknowledging the inherent challenges that accompany this shift. Polls, breakout rooms, interactive whiteboards, videos, and games were all used to create more interactive learning experiences. One significant instructional challenge was tailoring the sessions to be relevant and engaging to students at various stages of their education (ex., high school students and medical students).

Initial request:
One session on biomedical literature searching and citation management



Instruction consultation findings:
Students should understand how to search for, organize, and appraise evidence-based biomedical information



Final content:
Using key EBM information resources, introduction to evidence synthesis, scientific publishing basics

Conclusion

Post-session feedback indicated that students were familiar with basic research concepts, but that information related to evidence synthesis and citation management was new to them. Learners also reported an appreciation for interactive and game-based learning. Distinguishing the differences between literature reviews and systematic reviews was a particularly effective instructional tactic across learner age groups. Students responded well to discussions surrounding the declining quality among some forms of evidence synthesis, the over-publication of evidence synthesis, research bias, and evidence synthesis as status symbols in biomedical research. Future opportunities include more formal assessment of instructional sessions and the adoption of culturally responsive teaching.

Medical Student Summer Fellowship Program Data

