Episode 19: Engaging Didactics: Bringing Medical Education to Life

Guest: Omer Awan, MD, MPH, CII, Associate Professor of Radiology and Associate Vice Chair of Education at the University of Maryland School of Medicine; Teaching and Learning Lead for Aquifer Radiology.

Host: Lynne Robins, PhD, Professor Emerita, Department of Biomedical Informatics and Medical Education, University of Washington School of Medicine, Seattle, WA.

Description: In this episode, Dr. Omer Awan provides encouragement, motivation, and guidance for mastering the skills of preparing and delivering compelling educational presentations to improve student learning retention and transfer. He also offers tips for using Aquifer resources to increase peer-to-peer interaction and learning during instructional sessions.

Show Notes:

1. Speakers need to be able to engage their audiences. All educators can learn to prepare and deliver compelling presentations that attract and hold the audience's attention.
   a. Learn to demonstrate confidence, enthusiasm, and relatability. Humor is a particularly effective tool to help engage your audience.
   b. Practice your presentation skills to gain proficiency.
   c. Seek coaching. Record yourself and seek critique.
   d. Watch others who are skilled presenters.

2. Presentations are most effective when they are audience-centered. It is important to give the learner something that will affect them and help them to retain knowledge so they can use it in the future.
   a. Presentations are ‘not about you they are about your learner’ and should be tailored to learners’ needs.
   b. Ask questions to get insight into learner needs.
   c. If you give less information sometimes that is giving more. Increase retention and learning by focusing on one or two teaching points.
   d. Tell stories. Emotion can increase retention.
   e. Use active learning methods to help learning stick and assess learners' knowledge and clinical skills. Give learners time and application exercises to apply and internalize information.

3. Using Aquifer in a Flipped Classroom is an effective way to increase learner retention and transfer of knowledge.
a. The flipped classroom is an excellent audience-centered model for increasing learning. Cases provide a baseline of knowledge for discussion. Didactics serve primarily as a refresher and opportunity for expanding knowledge and skills.

b. Peer-to-peer learning can improve learner performance on rotations and standardized exams.
   - Omer’s recommendation for instituting peer learning in the classroom: In advance of an instructional session, send 5 cases (for example) to the whole class. In the class, divide learners into 5 groups (one for each case). Groups comprised of learners with a diverse range of experience are very effective. Have groups discuss a single case for 10-15 minutes. Bring the entire class together and have a representative from each group present their findings to the whole class. The teacher’s role in this format is to coach and facilitate, providing additional pearls and ensuring correctness.

4. Prepackaged Aquifer materials make it easier for faculty to deliver high-quality educational content when they don’t have time to prepare teaching materials. Additionally, it helps faculty to teach across disciplines.
   a. For example, if there is no radiologist to teach radiology in an Internal Medicine clerkship, faculty can access Aquifer’s radiology resources to support their teaching.
   b. Faculty should be encouraged to tailor Aquifer resources to their needs. Add, delete, or edit slides to focus on what their learners really need.

Aquifer Radiology Flipped Classroom Sessions:
   - Aquifer Radiology Flipped Classroom Sessions – Available in the Educator Resources Tab of your Aquifer Account

Additional Resources:
   - Aquifer Educator Guides & Teaching Tools
   - Dr. Awan’s Article: Insights on delivering an effective radiology resident Lecture
   - Dr. Awan’s YouTube Page
   - Dr. Awan’s Twitter
   - Dr. Awan’s Instagram
Theme Music: “Little Idea” by scottholmesmusic.com