EMORY | WOODRUFF HEALTH SCIENCES CENTER | Woodruff Health Educators Academy

Volume 4, February 2023

WHEA EXPLORATIONS IN TEACHING AND LEARNING

In This Volume:

In This Volume:

EDITOR'S NOTE

Ulemu Luhanga, PhD, MEd, MSc
Co-Director
Woodruff Health Educators Academy (WHEA)

One of the program deliverables for the WHEA Teaching Fellowship is a Small Teaching Report. Fellows are asked to pick a topic/concept that was covered during the program and use the Experiential Learning Cycle to 'test' out a small but powerful modification to their teaching design or practices. This newsletter represents a compilation of reports from the 2022-23 WHEA Teaching Fellows.

DIRECTOR'S REFLECTIONS

Taryn Taylor, MD, MEd
Co-Director
WHEA Teaching Fellowship

The WHEA Teaching Fellowship was developed to support the professional development of individuals who are passionate about teaching and learning.

Each cohort of the WHEA Teaching fellowship amazes me with their insight and creativity and this group of scholars is certainly no different. They have applied principles of curriculum and instructional design to aspects of their current teaching practice, expertly interweaving fundamentals of adult learning theory. This has promoted versatility in content delivery and fostered the creation of safe learning environments, allowing them to meet the needs of diverse learners. Join us as we celebrate their "wins" and learn from their reflections.

NOTE: Our fellows use the mnemonic “Hook ‘em, Teach ‘em, Assess ‘em” to chunk and apply Gagne’s Nine Events of Instruction model. This mnemonic was developed by Richard Ramonell, MD during his time as a learner in the EUSOM GME’s Medical Education Track.

Written by Andrea Alexis, DNP, MHA
Director Geriatric Extended Care Nurse Practitioner Residency Program
Atlanta VA Health Care System

CONTEXT:

My learners are Nurse Practitioner residents with no previous nurse practitioner experience. However, they have among them a minimum of 5-12 years of experience as Registered Nurses. I am the Director of this 12-month residency program and the residents are completing the first quarter of the program. I am charged with the responsibility of ensuring that the residents are "clinic ready" when they start clinicals with their preceptors. These residents are currently experiencing the "Imposter Syndrome", they are finding it difficult to transition from the role of nurses to that of providers. Physical Assessment is an integral part of a patient encounter, and it is important that these residents develop those critical "provider skills" in order to accurately diagnose and treat patients. This is a much more complex assessment than they were accustomed to doing as nurses. The first month of the program was dedicated to obtaining computer access, assimilating them to the VA's culture and perfecting their assessment and diagnostic skills. The teaching of the assessment skills was typically conducted in the weekly didactic sessions utilizing a variety of teaching strategies such as simulation exercises, case studies, role play, and other strategies discussed below.

SELECTED TEACHING & LEARNING TOPIC:

I utilized the principles of Gagne's 9 Events to frame my didactic days. Based on the Universal Design of Learning concept of "No one left behind", I intentionally stayed away from "one size fits all" and tailored the delivery of my subject matter to meet the diverse group of adult learners.

In the "Hook 'em" stage, I utilized multiple means of engagement strategies. I utilized videos, memes, safety stories (why this matters); surveys regarding learning deficits/needs/strengths, learning styles and areas of interest for their electives.

In the Teach 'em stage, I capitalized on the knowledge that 65% of all learners are visual learners by utilizing multiple means of representation to meet their diverse needs. I utilized simulation, videos, role-play, games and case studies. In some cases, I even utilized the Flipped classroom where I had a select resident present on a topic which I vetted prior to the presentation for accuracy.

In the Assess 'em stage, I utilized surveys, demonstrations, discussion with embedded questions and Kolb's Reflective model for self-reflection. These strategies were useful in identifying the depth of learning and retention exhibited by the residents. The focus was on identifying in the debriefing session, what worked, what didn't work and suggestions for improvement.

LESSONS LEARNED:

I have learned that an individual learns best when the teaching strategy aligns with the learning mode/abilities of the learners. I also better understand that it is important to periodically shift gears with purposeful pauses to evaluate what works and what does not. The survey and reflective discussions were instrumental in directing my planning for a robust clinical experience and the development of optimal physical assessment skills. The residents were always engaged and were enthusiastic about attending didactics.

IMPLICATIONS FOR FUTURE PRACTICE:

This strategy is ensuring a smoother transition from a Novice Nurse Practitioner to a more competent practitioner by the end of the 12-month residency. The strategies utilized are ensuring that the residents take a more active role in their learning.

I would highly recommend this approach to promote the smooth transition from one role to another such as that of a nurse to a nurse practitioner. The 'imposter syndrome is real, and this gradual realignment of roles helps for a smooth transition. It is important to be proficient at utilizing class time for group-based activities which not only promote learning but also helps them to bond, share ideas, reduce stress, increase their confidence, create more meaningful experiences in class which translates into increased professional growth.

TEACHING TIPS

It is important to assess the preferred learning styles of your learners and gauge your teaching styles to fit their diverse needs. This will typically result in more engaged learners. Participating in a reflective discussion model is also instrumental in evaluating the teaching strategies and provides feedback for improvements moving forward. In hindsight, recording the simulation and role play exercises would be beneficial to stimulate a more robust reflective session. The recordings would also be beneficial to future cohorts. This teaching strategy albeit more time-consuming yields great results and ensures that the goals and objectives of the lessons are met.

Written by Inga Ardzevanidze, MS, RN-BC
Unit Nurse Educator, Unit 72
Emory University Hospital Midtown

TITLE:
Teaching 1st semester Nursing students how to formulate and prioritize Nursing Plan of Care for their patients

CONTEXT:
My learners are first semester Nursing students in the setting of their first clinical rotation in the acute care setting. This is in-person, mostly observational and hands on learning experience for students. Since by this point many of them have already had a lot of classroom exposure to pathophysiology of different diseases, many students in their first clinical rotation tend to focus on the medical issues on their patients and their interventions tend to revolve around and focus on the medical diagnoses.

The goal of this educational activity is for students to understand better the scope of nursing practice in acutely ill patients.

Each clinical day in the hospital is 10 hours long, out of which approximately 1 hour is dedicated for post-conference. During the post-conference the students often are asked to present their patients to the their clinical group in an SBAR format and reflect on their learning. Often, we also discuss different pertinent nursing topics.

SELECTED TEACHING & LEARNING TOPIC
During one of the post-conferences, I chose the present to the students topic of nursing diagnoses. I used the strategy of hook em teach em, assess em.

Hook em: showed a few funny memes displaying nursing diagnoses

Teach em: using a short power point presentation, I defined the nursing diagnosis, explained the difference between the nursing and medical diagnoses. Further, I explored how the nursing diagnose can help enhance the care of the patient and provide them with a more holistic approach. To make the presentation more practical, I used examples of patients with certain medical problems and showed what nursing diagnoses could be selected based on the symptoms the patients presented with.

Assess em: students had the opportunity to demonstrate their understanding of the topic by selecting appropriate diagnoses and interventions for the patients they cared for that day.
The end goal of this short teaching

exercise is to help students correctly complete their final case study assignment at the end of their 6-week clinical rotation.

LESSONS LEARNED:

Overall, this teaching proved to be helpful to the students. It made their clinical experience more meaningful. This information was also helpful in completing their final assignment: they did not have as many questions the week of the deadline of the assignment, and received better grades compared to students from the previous cohorts.

IMPLICATIONS FOR FUTURE PRACTICE

I would incorporate the same education in the future, but perhaps shorten the didactic portion of it. I would also like to add and try a few things that may enhance the learning:

- Provide more real-life examples.
- Continue re-iterating this education by having students present their patients during each post-conference session using nursing diagnoses/interventions they have selected for them.
- Incorporate more group activities
- Incorporate some reflection exercises that would allow students express their feelings and understanding towards the topic learned

Written by Nassoma Bumpers, PA-C
Multiple Myeloma Learning Module
Winship Cancer Institute
Emory University

TITLE:
Multiple Myeloma Learning Module

CONTEXT:
My learners are Advanced Practice Providers Oncology Fellows
The learning environment is divided into two locations - power point and case study in a small classroom setting and the simulation in a clinical setting.

SELECTED TEACHING & LEARNING TOPIC

- Topic applied: Enhancing teaching and learning session presented on 8/18/22
- Module: Utilized Gagne's: present content, provide guidance, practice

Present content:
2 learning methods used- Power Point presentation and Case studies

- Hook em with catchy title (Chocolate, Mimosas, and Myeloma: A Lecture and Sim Collab) and learning objectives emailed prior to presentation date
- Power Point with opportunities for real time discussions and matched the learning objectives
- Case studies (2 in-depth cases) reinforced the information from the Power Point lecture
- Interactive utilizing a white board
- APP Fellows worked with each other to make treatment decisions and plans

Provide guidance:
Case studies provided opportunities for guided learning

- APP Fellows interacted with content expert
- Worked in 2 groups to create treatment options
- Reviewed and discussed plan with content expert with discussions after each case

Practice:
Clinical simulation with a "patient" (volunteer APP): provided additional "practice"

- 2 clinical cases with the Fellows divided into groups: 1 actively involved in the case and 1 group observing; then switched over
- After patient interaction groups worked together on the white board to document what information they gathered during the patient experience
- Created assessment/plan
- Debrief with each other and Fellowship team after each simulation
- Volunteer APP also gave feedback on the patient experience

LESSONS LEARNED:

- Fellows liked receiving the objectives in advance
- Hooked by the title
- Combining the learning methods (PowerPoint, case studies, simulation) reached everyone's learning styles.
- Real time discussion and using whiteboard with the content expert was helpful
- I was able to see the learning retention during the clinical simulation
- Real time feedback as much as possible

Anything unexpected?

- Difference in exposure to Multiple Myeloma- some of the APP Fellows had already rotated in the Myeloma clinic but some had not
- Volunteer APP would get sidetracked causing confusion

IMPLICATIONS FOR FUTURE PRACTICE

- Consider changing the timing of the module
- Keep the same format of power point lecture -> case study -> simulation
- Prepare the "patient" in more detail and consider utilizing a paid standardized patient for some simulations
- Would like to incorporate the 3-2-1 method after each learning module
- Add simulation learning objectives/rubric so learners can know what to expect

TEACHING TIPS:

- Add as much interactive teaching as possible: polls, whiteboards, discussion time
- 360-degree feedback: participants, observers, fellowship team, patient
- Involve content expert as much as possible not just for the lecture

Written by Katie Burkhart RN, BSN, OCN
Unit Nurse Educator
Emory Winship Cancer Institute Johns Creek

TITLE:
Chemotherapy Policy Introduction to New-to-Oncology RNs

CONTEXT:
My learners are new-to-oncology RNs; primarily new graduate nurses. Short (35 minute) Classroom Lecture

SELECTED TEACHING & LEARNING TOPIC
Universal Design for Learning (UDL).
I was tasked with teaching a group of 12 new-to-oncology RNs about Emory's Chemotherapy Administration Policy. With only 35 minutes to complete my teaching session, teaching learners the entire content of the policy was an unrealistic objective. Instead, I applied concepts from the UDL with the the objective of introducing learners to navigating and using policies, specifically by providing guided practice in using Emory's Chemotherapy Administration for Oncology Nurse Policy. The learning outcomes were that by the end of the session, learners would be able to:

- Demonstrate how to locate the Chemotherapy Administration Policy.
- Relate why and how to apply the policy to practice. (primarily an affective goal)

Principle 1: Affective (Hook 'em)
I opened the presentation by posing the question: What are policies & procedures, and why do I care about them? To answer this question, as the lecturer I provided definitions and personal anecdotes. Learners were also encouraged to recall their personal experience and to brainstorm out loud with the class.

Principle 2: Recognition (Teach 'em)
For the first part of this section, I demonstrated from the presentation screen various ways to access and locate policies, focusing on the chemotherapy policy. Some learners also chose to log in to their computers and follow along and save links as favorites. Had I known in advance that computers would be available, I would have planned in more time to allow all learners to follow along.

The main teaching portion was done using Jig Saw. The class was divided into 4 groups of 3 and provided copies of the policy. Each group was given one topic that is covered in the policy, with 2-3 questions to guide their focus. They were then given 5-10 minutes to explore the policy in their groups, then shared with the larger group the answers that they found in the policy.

Principle 3: Strategic (Assess 'em) Learners were encouraged to ask any questions they had as they worked in their groups. Questions asked during this phase, answers learners presented, and the subsequent questions and conversations that occurred in the larger group provided opportunity to provide feedback to learners and assess the success of the learning outcomes.

LESSONS LEARNED:

It would have been good if I had had someone (ideally with similar experience level as my learners) review the group questions. Based on some questions that learners asked during the Jig Saw group activity, some of my questions lacked clarity needed by the inexperienced nurses (perhaps they were too open-ended).

IMPLICATIONS FOR FUTURE PRACTICE / TEACHING TIPS:

At the time that I completed this teaching, we had not yet attended "Assessing Learning Part 2", however upon reflection, I see that the primary purpose of this lecture was enhancing future learning, with an affective outcome focus. This was largely a result of the time limitations on this session. Since I did not have the time teach them the important content, I wanted them to see the importance of seeking out the content for themselves and feel impowered to do so. I am glad that I chose this focus, as opposed to trying to throw as much information as possible at them in the limited amount of time we had.

Future oncology nurse resident classes will have a larger amount of allotted time. With the expanded time, I would like to maintain an affective focus, but would also like to add knowledge focus.

As I add content, I would also like to add more varied ways for learners to engage and demonstrate what they have learned.

Written by Shraddha I. Cantara, DVM, MS
Clinical Veterinarian and Assistant Professor
Pathology and Laboratory Medicine
Emory University, School of Medicine

DISCLOSURE:
I have not created or started the course I am describing as my Capstone Project. This is future goal of mine and I am using WHEA to help me build the skills to be able to implement a course and teach it in the future.

CONTEXT:
Who are your learners? Graduate students who work with animals in biomedical research.

Teaching/Learning setting (e.g., community, lab, classroom, clinic)? Traditional Classroom and Teaching Lab

.

SELECTED TEACHING & LEARNING TOPIC:
Which topic did you apply in your context? I will be using the Universal Design of Learning framework.
I will be using the "hook em", "teach em", and "assess em" strategies in my classroom/lab. We will watch a small medical show clip and have them point out any errors they notice as an engagement "hook em" strategy. I will use memes, GIFs, cute animal pictures,etc. to keep them engaged during the "teach em" lecture session of classes.

LESSONS LEARNED:

Unable to answer at this time.

IMPLICATIONS FOR FUTURE PRACTICE / TEACHING TIPS:

Unable to answer at this time.

Written by Jasmine Clark, PhD
Senior Clinical Instructor
Nell Hodgson Woodruff School of Nursing
Emory University

TITLE:
Flipped Classroom Model for Anatomy & Physiology for Undergraduates

CONTEXT:
My learners are undergraduate, 2nd-year and old, pre-nursing students that are applying to the School of Nursing (or other healthcare programs)

Students are required to take pre-requisite courses, such as Anatomy and Physiology to lay the foundational knowledge used in nursing courses and the nursing field. One of the courses that students are required to take in their first year of Nursing school is pathophysiology. In the past, students that did not have a strong foundation in physiology struggled to do well in subsequent pathophysiology courses.

SELECTED TEACHING & LEARNING TOPIC:
My goal is to promote active learning in my Anatomy and Physiology courses that all the students to go beyond the first two levels of Bloom's taxonomy (remember and understand) to the third tear of "apply." By having students begin to explore pathophysiological concepts in the context of physiology, students will be much more prepared to do well in their first year nursing pathophysiology class.

In order to do this, in one class period, where we were studying the physiology of the gas exchange, I delivered a 45-minute lecture on the mechanisms of gas exchange in the body and what causes oxygen to unload from red blood cells and go into tissues. For the last 30 minutes of class, I did the jigsaw method where students were broken up into small groups and given a set of scenarios that may or may not alter or affect gas exchange. Students were given 15 minutes to work with their group members to answer the question of what would happen to hemoglobin saturation and the partial pressure of oxygen for each scenario. For the final 15 minutes of class, different groups reported their answer to the scenarios.

LESSONS LEARNED:
From the activity, I learned that some students really grasped the concepts learned in the first 45 minutes of class, while other students seemed to really struggle to apply what they had just learned so quickly after learning it. However, this did allow students that did understand to help students that had not quite grasped the concept in a smaller group setting.

I learned that students really enjoy breaking up the monotony of lecture by having a moment to apply what they have learned.

IMPLICATIONS FOR FUTURE PRACTICE

After completing this activity, I would like to do this in the future for other anatomy and physiology topics, but the main issue is time. The flipped classroom, however, will offer the ability to have more class time to do this type of active learning, as opposed to trying to squeeze an hour and 15 minute lecture into 45 minutes, or only giving students 15 minutes to work on these types of assignments (which disadvantages students that need a little more time to understand and grasp the concept).

Written by Katie Cole, DNP, CRNA, CHSE
Sr. Clinical Instructor, Nurse Anesthesia, DNP
Nell Hodgson Woodruff School of Nursing
Emory University

TITLE:
An Evidence-Based Initiative to Improve Simulation Learning Outcomes and Experiences in Student Registered Nurse Anesthetists

CONTEXT:
My learners are student registered nurse anesthetists (SRNA)s. SRNAs are registered nurses in an accredited doctoral of nurse practice (DNP) nurse anesthesia program. The Nell Hodgson Woodruff School of Nursing at Emory University has a 36-month DNP nurse anesthesia program that accepts 15 students each year. The program consists of didactic, clinical, and simulation training experiences. Upon graduation, students take the national certification exam to receive their license as a certified registered nurse anesthetist (CRNA). This teaching project involves students from all three cohorts (45 students) of the DNP Nurse Anesthesia Program at Emory. This ongoing initiative occurs in the simulation lab.

SELECTED TEACHING & LEARNING TOPIC:
The learning initiative introduced involves aligning simulations with best practices. The International Nursing Association for Clinical Simulation and Learning (INASCL) outlines ten standards of best practice (Watts et al., 2021). Transitioning the simulation program to these standards involves several topics explored throughout the teaching fellowship. Standard three recommends the purposeful development of objectives to optimize learning outcomes. By creating clear concise objectives using Bloom's Taxonomy, the methods discussed in the "Aligning Learning Needs with Outcomes" lecture, and those outlined in Biggs Constructive Alignment, we have been able to ensure expectations are clear up front and evaluate that the learning objectives and outcomes have been met by the end.

Standard five of the INASCL standards of best practice underscores the importance of the debriefing process. We successfully aligned with this standard by instituting reflective practice followed by an advocacy-inquiry method to encourage performance evaluation. Each debriefing period started with the question, "How did you feel about the simulation?" We then encouraged them to reflect on their actual performance. Once they evaluated their performance and identified areas of

opportunity, we would discuss areas for improvement noted by the faculty and allow them to express their thought process while making that decision.

LESSONS LEARNED

Although I have always devoted time to developing quality simulations for our students, there's a clear difference in the time required to develop and run the scenarios. However, the return on investment has been remarkable. I have been blown away by the unsolicited positive feedback received from the students.

IMPLICATIONS FOR FUTURE PRACTICE

There are many aspects to our simulation program. Up to this point, I have only worked to align our high-fidelity scenario-based simulations with the standards. My goal is to incorporate these standards throughout all learning experiences in the simulation space. This includes low-fidelity simulations and task-trainer/tissue-based experiences.

The most important change I have made up to this point is to increase debriefing time. Self-reflection and peer discussion have been imperative to the success of this learning initiative, and I wanted to ensure they had enough time to have these conversations.

TEACHING TIPS

Give yourself more time than you think you need. Developing the simulation, completing a dry run, and debriefing took more time than I anticipated. Debriefing proved to be most valuable to student learning and enough time should be allotted for a comprehensive debriefing conversation.

Engage the students during debriefing and listen as they speak. Students nearly always identified their own mistakes. Allowing them time to self-reflect and discuss the simulation amongst their peers made the debriefing process more impactful.

REFERENCE:

Watts, P., Rossler, K., Bowler, F., Miller, C., Charnetski, M., Decker, S., Molloy, M., Persico, L., McMahon, E., McDermott, D., Hallmark, B. (2021). Preamble. *Clinical Simulation in Nursing*, https://doi.org/10.1016/j.ecns.2021.08.006.

Written by Calli Cook, DNP, APRN, FAANP
Clinical Assistant Professor
Nell Hodgson Woodruff School of Nursing
Emory University

TITLE:
The Art of Moving Advanced Practice Nursing Core Courses from the Classroom and into the Living Room

CONTEXT:
Distance learning represents an important opportunity for ongoing nurse education. Through distance learning nurses are able to engage in education while maintaining their current roles within the nursing field. However, the transition from face-to-face classroom learning to an online classroom can be daunting for both learners and faculty. The aim of this project is to maintain high levels of student engagement while meeting the needs of the diverse nursing student population through distance education.

Our learners included both MSN and DNP students. In total, these learners make up eleven specialty programs including: family nurse practitioner (NP), adult gerontology primary care NP, adult gerontology acute care NP, pediatric primary care NP, pediatric acute care NP, neonatal NP, psychology and mental health NP, emergency NP, midwifery, women's health and gender related NP, and nurse anesthesia.

SELECTED TEACHING & LEARNING TOPIC:
One topic that was applicable when moving the classroom to an online platform was learner engagement. Learners need to feel engaged in the process of learning; however, the online classroom has limits and, in some cases, decreases the opportunities for student engagement. The aim of this project is to enhance learner engagement and evaluate the effect of online engagement on learning.

The advanced practice nursing students at Emory University greatly appreciate practice style questions to assist them with board prep. Understanding this valuable point, our team integrated poll style questions throughout each weekly lecture. Learners were able to participate in polls and evaluate their learning compared to peers. Additionally, when lectures were asynchronous the teaching team created studio quizzes that allowed each learner to answer practice questions and receive feedback.

Data captured within the midterm evaluation period suggested that students were pleased with the polling questions and felt better prepared for learning assessments within the course.

LESSONS LEARNED

Several themes emerged upon implementation of the project. First, the teaching team received positive feedback regarding the addition of polling questions. Learners felt more prepared for quizzes and exams due to their exposure to questions. Additionally, the teaching team was readily able to assess his or her teaching performance based on polling. The teaching team could hone in on a muddy concept and correct learning in real time—this was huge win as one of the limitations of online learning is the inability to "read the room." Polling allowed our team to "read the online room" without the ability to visually perceive confusion or concern on the faces of the learners. While there were many positives, there were also negative components of this intervention. The most challenging negative aspect of polling was real time push back from students regarding the difficulty of questions. This led to improved faculty understanding of the gaps in student knowledge.

IMPLICATIONS FOR FUTURE PRACTICE

For future iterations of this course, polling should be continued to enhance student engagement. However, a pre-class learning module, focused on basic knowledge for this course could be included. While readings are provided to learners, a pre-class video module could decrease learning gaps and reduce the discomfort of the learner while in class.

TEACHING TIPS

Key components to consider when using polling as a method for learner engagement is to ensure that the polling questions are as rigorous as quiz and exam questions. This will give learners direction regarding what is required from them to be successful in the course and enables faculty to assess whether or not his or her teaching methods are effective. Faculty should also consider the time needed to launch polling questions and discussion, making sure all essential content is covered during class time.

Written by Abimbola Faloye, MD
Assistant Professor of Anesthesiology
Emory University School of Medicine

TITLE:
Teaching Busy Faculty Skill Vs Knowledge

GOAL: Test out Biggs Constructive Alignment
My big picture "aha moment" came with learning Biggs constructive alignment- the concept of aligning teaching objectives to assessment of outcomes drove home a foundational concept of teaching for me. To test out this concept, I restructured my talks to align with specific learning outcomes and conduct assessments that align with those outcomes.

CONTEXT:
My learners are faculty members of all ranks within the department of anesthesiology. Online webinar setting.

SELECTED TEACHING & LEARNING TOPIC:
Biggs Constructive Alignment. I thought about my learning outcomes and worked backwards to structure my objectives and assessment methods.

LESSONS LEARNED:
I learned that crafting objectives based on outcomes makes the lecture more intuitive and easier to engage my audience. Additionally, I noticed that there were times in the past when I had chosen a poor context to teach a skill- for example teaching a skill in the didactic form without an opportunity for hands-on practice. I have now restructured my talks to focus on knowledge when giving webinars and planning a hands-on session when teaching a skill.

IMPLICATIONS FOR FUTURE PRACTICE / TEACHING TIPS:
I will always start with my learning outcome then work towards structures precise objectives and pair appropriate assessments with the learning outcomes.

I think it is important to really ask about learning outcomes before planning curricula or lectures.

Written by Michael A. Gallagher, M.D.
Assistant Professor of Medicine
Hospitalist at Grady Memorial Hospital
Emory University School of Medicine

TITLE:
Team Teaching Reimagined: Tackling Tough Topics

CONTEXT:
My learners are my current Emory Internal Medicine Wards Team at Grady Memorial Hospital, specifically a third-year medicine resident, two transitional year interns, and one third-year medical student. The Teaching/Learning setting is our team's designated workroom at Grady Memorial Hospital.

SELECTED TEACHING & LEARNING TOPIC:
Chose to apply "Strategies for Enhancing Teaching and Learning" & "Reflection on Action"

What did I do? Hepatitis B is an incredibly daunting topic, one that is far too long for a mere chalk talk. Additionally, if I tried to give four unique chalk talks related to Hepatitis B, my team would most assuredly lose interest or fall asleep entirely. Rather, I chose to engage them with a modified version of "Hook 'em, Teach 'em, and Assess 'em."

First, the topic of Hepatitis B was relevant to our team because we had tested hepatitis serologies in two patients and had not yet had an opportunity to discuss what they meant. This does not necessarily make everyone interested of course. Instead, I first tapped into why each learner should care: the topic was soon to be on their Internal Medicine Boards / Infectious Disease Boards, Step 3 exam, or Internal Medicine Clerkship Shelf Exam. As such, each learner knew that it was an important topic that would return in the not-so-distant future and that by obtaining a little knowledge now might be rewarded later. But testable material alone is not going to make something memorable or engaging and so I did two additional modifications.

Regarding the first modification, I chose to prime them by giving the first of the four talks on day 1: Hepatitis B Serologies. By priming them with my 10-minute worksheet session on serologies, we were able to simplify an incredibly complex and often frustrating topic into an easily digestible segment, providing each learner with their own serology worksheet serving as a visual aid and highlighting several guiding principles. I ensured each team member had the chance to work through at least two problems (serology interpretations) and provide their clinical reasoning, varying my voice and offering positive and constructive feedback as we moved through

the session. Technically, this also a version of "Teach 'em" and as such it serves a dual purpose. My session however laid the foundation for the next step in my modified "Hook 'em."

At the end of my small talk/worksheet session, I assigned each resident a topic related to Hepatitis B that I would like them to present on the next day: Hepatitis B Screening, Who to Treat, and How to Treat Them. This assigned topic was the second modification of "Hook 'em" and the most crucial one. Instantly, this assignment increased their engagement as they were now responsible for the education of their teammates the next day and would be giving a small presentation. Thus, these three modified "Hook 'em" tactics (emphasizing personal relevance, priming with a reliable worksheet session with visual aid, and assigning individual topics), effectively engaged each team member in a safe environment.

Now that they were hooked, it was time for the "Teach 'em." I had already done my session, however, by modeling an effective worksheet session and highlighting the utility of visual aids, each resident in turn took their own initiative to make a visual aid for their unique presentation topic. The effects were truly incredible (discussed below).

We then completed "Assess 'em" by using two board style review questions to assess their knowledge and instantly put their new knowledge to the test. Working as a team, they each spoke about the unique components of the questions which were relevant to their topics, and each time they were able to arrive at the correct answer with sound clinical reasoning.

Finally, I was able to use "Reflection on Action" by asking each team member to provide their individual feedback as to what worked well for them and why they found it to be such an effective method of content delivery.

LESSONS LEARNED:

I was struck by how much each team member thoroughly enjoyed the experience. First, each found themselves remarking at how engaged they were in listening to their colleagues, incredibly invested in the brief presentations of their colleagues, studying each feature of the visual aids. The engagement was optimal because several brief presentations were far more effective than listening to one presenter for an extended duration of time, both because each presentation is briefer, holding your attention for just the right amount of time to be interesting and fun, and because each unique presenter has a chance to shine and feel valuable to their colleagues with each team member in return showing a strong desire to listen and learn. Second, because they are all teaching a section of the same larger topic, they all became more interested in seeing how the other pieces related to their own, further enhancing their own knowledge of the subject. Third, just as the engagement during the session and energy level were right, the level of preparation for each team member prior to the session was not burdensome, taking less than twenty minutes. This enabled each

team member to become very learned in a section of Hepatitis B to effectively communicate this to the team, demonstrating a level of proficiency needed for excellent clinical care, all in a very brief period. Fourth, the assessment questions reinforced the knowledge they had just shared and ensured they would each be able to readily apply this.

Most importantly, I was truly blown away by the team's level of enthusiasm and genuine enjoyment while teaching and learning together. It has certainly changed the way I approach team-based teaching.

IMPLICATIONS FOR FUTURE PRACTICE / TEACHING TIPS

Based on the level of overwhelming positive feedback from each learner and their stated desire to do more teaching sessions like this, we have already scheduled a second session for this two-week block (Adrenal Insufficiency). Moving forward, I will be certain to implement this again each time I am on a wards team, ideally for 3 sessions total per two-week block. I found it incredibly helpful to have modeled a presentation for them first and indicated the power of visual aids prior to their presentations, as this led to each one preparing a chart that they could walk our team through.

I am incredibly excited to see the continued positive impact this makes in each team member's desire to learn, depth of knowledge, and their enhanced teaching skills as they all continue to grow. Team Teaching is an effective modality for facilitating group learning without putting you, the attending physician, at the center. Instead, the team members take on roles of both learner and educator, delivering more benefits than I had ever thought possible. I especially suggest it for the tricker topics that are notoriously tough to grasp. The team-based approach made it most effective, breaking it down piece by piece and engaging all members to optimize learning and teaching, so much that it was instantly requested that we do it more frequently.

If someone is planning to apply it to similar topics, I would say ensure that it is clinically relevant to a recent case to emphasize the timeliness of it and ensure that a safe and respectful learning climate has been established where each team member can thrive.

Written by Morgan Gause, MD
Assistant Professor
Department of Anesthesiology
Emory University Schol of Medicine

CONTEXT:
My learners are resident physicians in the department of anesthesiology (PGY 1 – PGY 4 trainees). The resident physicians participate in simulation activities 3-4 times per academic year. These in-person sessions last approximately 45 minutes and are usually conducted at our HPS (Human Patient Simulator) facility that features a simulated operating room and a high-fidelity patient simulator. The simulation modules are designed to give the trainees exposure to critical events and other important clinical scenarios in a "low-stakes" environment (no risk of harm to actual patients). The trainees are given the opportunity to demonstrate key skills required for successful completion of their residency training and future careers (clinical decision making, crisis resource management, communication and leadership skills in a multi-disciplinary environment, etc.) and receive immediate feedback from department of anesthesiology faculty members. The structure of the sessions is typically:

- Presentation of a novel clinical scenario / case vignette to residents (5 min)
- Residents enter the simulation environment (either solo or as pairs depending on their level of training) and participate in the simulation (15 min)
- Post-Simulation debrief with the faculty members who participated in the session to review things that were done well, identify areas for improvement, disseminate additional learning resources for the specific simulation topic, and answer questions (20 min)
- Evaluation: Residents complete evaluation forms to provide feedback on their experience that we use to modify / improve the simulation curriculum (5 min)

SELECTED TEACHING & LEARNING TOPIC:
The "3-2-1" method of assessing learning and retention and eliciting feedback from learners. As a new part of the post-simulation debrief (adding an additional 10-15 min), I employed the "3-2-1" tool that we discussed during the WHEA session on "Strategies for enhancing teaching and learning". I asked each of the residents to share:

- 3 new things that they learned during the actual simulation or the debrief session

- 2 changes to their current clinical practice that they planned to make as the result of this new knowledge
- 1 "muddy" concept that they were still unclear on and/or planned to research further

LESSONS LEARNED:

Eliciting this type of structured feedback from learners was a great way to stimulate discussion - especially amongst more reserved learners who may not have spontaneously volunteered to reflect on their simulation experience in such detail. Compared to past debrief sessions (prior to inclusion of the "3-2-1" tool), the residents seemed more engaged in their dialogue with faculty members. The "1" portion of the exercise also helped to identify some potential weak points in the curriculum design for that session where we can work to improve clarity on some of the learning points in the future.

It was surprising that many of the things that the residents identified as key take-home points or new knowledge gained during the simulation sessions during the "3" portion of the exercise were frequently not the intended learning objectives for that session!

IMPLICATIONS FOR FUTURE PRACTICE:

- Continue to use the "3-2-1" tool as a part of the post-simulation debrief
- Modify some portions of the simulation to address common themes identified as "muddy" concepts

TEACHING TIPS:

Just do it! However, it may be helpful to let learners know prior to the learning activity exactly what the "3-2-1" questions are that they will be asked at the conclusion of the module. Some of my learners did communicate that they experienced a little anxiety ("being put on the spot") when asked to give the answers to those questions in a relatively short-time frame.

Written by Kallio Hunnicutt-Ferguson, PhD
Assistant Professor
Psychiatry and Behavioral Sciences
Emory University School of Medicine

TITLE:
Teaching Medical Students About Suicide Risk Assessment and Safety Planning

CONTEXT:
My learners are third year medical student small groups. The setting is a virtual classroom using Powerpoint presentation. I was tasked with facilitating these lectures several times per year during the pandemic so these lectures have always taken place virtually over Zoom. However, I have noticed that compared to other in person lectures I do with medical students, this one seems to have lower engagement and I felt that students' learning would benefit from their more active engagement in discussion and problem solving.

SELECTED TEACHING & LEARNING TOPIC:
Gagne's 9 Events of Instruction: Hook em, Teach em, Assess em.
Use of new strategy of presenting video clip and case example to "hook" audience (Hook em), which I then returned to throughout the instruction on how to do a risk assessment and develop a safety plan (Teach em) as well as in having students collaboratively complete a hypothetical safety plan (Assess em).

LESSONS LEARNED:
I learned that students can be more disengaged in a virtual learning format, and being intentional about using/implementing strategies for better hooking them at the outset improves engagement in collaborative discussion, which hopefully translates to more internalization of the material and ability to engage in experiential practice.

IMPLICATIONS FOR FUTURE PRACTICE:
I would like to brainstorm additional "hook em" strategies throughout the lecture to maintain adequate engagement for the duration. I think there is a tendency to fall into lecturing after an initial "hook" which then can result in loss of interest/engagement on the part of the students towards the middle/end of lecture. I would also want to brainstorm more of a range of hook em strategies – humor is always a nice way to engage but some of the topics I present on (like suicide) aren't always conducive to this, so finding additional strategies that help engage students would be helpful.

TEACHING TIPS:
Consider your context; a virtual learning format may result in more disengagement on the part of students, and therefore "hook em" strategies may be helpful to integrate

throughout the lecture. Also be willing to push yourself out of your comfort zone and be creative in your approach. There are strategies that work better than others and sometimes it takes some experimentation/willingness to be uncomfortable to test different ideas out!

Written by Lorna A King, RN MSN Ed CRN
Veterans Affairs Nursing Academic Partnership (VANAP) Faculty
Atlanta VA Health Care System

TITLE:
VANAP-U Development Teaching Class

CONTEXT:
My students are VANAP Undergraduate nurses. Teaching/Learning will occur in the clinical classroom setting. Learner centered, not teaching promoted, with feedback continuum, at the start, during, and after.

SELECTED TEACHING & LEARNING TOPIC:

- IRS Insights-Resources Applications will be applied. Students will be allowed to write down what their expectations are for each session/the class.
- This will be applied for VANAP-U NRS 452 class didactics as well as ay undergrad instructional sessions, making minor adjustments. The focus will not be the subject matter, the focus will be applying the which will be.
- Students were allowed to have a centering activity before class and allowed to choose to lead centering in first or one subsequent session.

LESSONS LEARNED
I learned that the students were timid and possibly anxious. They were allowed to participate much but still were not as actively participative as I would have preferred.

Towards the end of the didactic classes I had past student participate in the sessions while I sat to the back. I asked them to share and ask questions. As I left the class momentarily, upon returning, I could hear much more exchanges and communication occurring. The students now were very much more engaged than previously, implying that faculty presence can be intimidating initially.

IMPLICATIONS FOR FUTURE PRACTICE:
In future classes I will implement the session to interplay session with past like student to allow the juniors to feel more comfortable and be able to better voice their opinions and concerns/questions.

TEACHING TIPS:
Stress is a normal reaction the body has when changes occur. This is definitely often the issue with new students entering a profession that had so many nuances, resulting in some often physical, emotional, and intellectual responses.

Stress management training can help you deal with changes in a healthier way. Having the centering classes and allowing student to participate on their own terms can help this stress.

Use of a CAT classroom Assessment Techniques on a continuum during post conference is certainly a great way to foster this best teaching and learning strategies.
Have them write down:
1. Three ideas/concepts reinforced.
2. Two new ideas or concept.
3. Question they still have.

Allow students to engage with senior students to allow more ideal representation for expectations.

Written by Priya Kohli, MD
Assistant Professor, Division of Cardiology
Emory University School of Medicine
Atlanta VA Medicial Center

TITLE:
Improving rotation feedback for cardiology fellows

CONTEXT:
My learners are cardiology fellows rotating at the Atlanta VA on the cardiology consult or CCU rotations. The teaching/learning setting is inpatient wards or ICU at the Atlanta VA Medical Center, a large government hospital with a large learner population (medical students, residents, fellows, PA students and residents, RN students, NP students and residents).

SELECTED TEACHING & LEARNING TOPIC:
I aimed to improve my feedback techniques as a teaching method.

I specifically used the R2C2 model in giving feedback to cardiology fellows, completing their consult or CCU rotations. I will give one specific example here. I used the R2C2 model in giving feedback to the cardiology fellow most recently completing their CCU rotation. We first discussed their goals for learning in the CCU as well as what their successes and challenges were for the rotation. The learner stated that their goal was to become a more effective team leader and improve their fund of knowledge. They felt that they did not lead the team well, especially with two residents that were not motivated to perform well. They felt they did well staying organized. Prior to giving feedback, I prefaced that there might be feedback that was disappointing but that we would work on a plan to improve performance together. My specific feedback to them was that I thought they did a great job keeping the team organized, rounding before team rounds to make sure that residents had all the relevant data, and the fellow came up with plans of their own. I agreed that their fund of knowledge could use improvement as many plans were not thorough or did not account for various nuances. I discussed that this was on par for a first-year fellow. I also discussed a particular patient that I felt the fellow got flustered by. The patient had a poor outcome, which the fellow did not handle well. We discussed their feelings. I validated their feelings of how helpless they felt when they could not help the patient, a feeling that I have also had when I am unable to help a patient despite all measures. I asked the fellow how they felt about the feedback. They felt that the feedback was fair. I then asked the fellow what steps they could take for improvement. We specifically discussed a reading plan – certain guidelines and

articles, and also discussed how to ask for help when they are feeling particularly helpless about a patient. The fellow developed this plan with me and felt that it was achievable.

LESSONS LEARNED:

I found the R2C2 model to be a particularly effective method of feedback. It was helpful to develop rapport with the fellow and understand their goals, before giving feedback. I also thought it helpful to state that the goal of my feedback was to work together to come up with specific plans for improvement. I still would like to develop a more specific plan for improving fund of knowledge – since this is the most needed are of improvement for most fellows. Coming up with a specific plan for that particular goal is difficult, as sometimes knowledge improves with experience that they will have in the future.

IMPLICATIONS FOR FUTURE PRACTICE

I will use this method again in the future. I will likely start the feedback process at the beginning of the rotation but collecting fellow goals and asking what their challenges are upfront. I will also provide written feedback that they can reference later (may be with a list of articles or resources to read).

TEACHING TIPS

For others seeking to improve their feedback, I highly recommend using the R2C2 model. I would suggest studying the method in advance of providing feedback, and I would consider incorporating direct written feedback to the learner.

Written by Meg Lawley, MD, MPH
Division of Family Planning
Emory Department of OBGYN

TITLE:
Evaluating medical student didactic changes through qualitative assessment

CONTEXT:
A new addition to our didactics was to increase the amount of simulation and case-based learning with a focus on high yield topics. We provide the subject content for the day's lectures the week before on Canvas and they are expected to review videos and lecture content prior to the didactic. The students then spend about an hour reviewing the material either via case based learning or lecture, followed by simulation or a game to help solidify their knowledge and identify gaps.

SELECTED TEACHING & LEARNING TOPIC:
Learning Assessment Techniques.
I used qualitative and quantitative means to evaluate these changes. The students received an anonymous survey after completing the course asking about their changes in addition to being asked in person during their mid point evaluations regarding their experience.

LESSONS LEARNED:
While we don't have the results of the quantitative survey data utilizing Likert scales to determine the objective scores, we did have some qualitative data. The students overall appreciated the in person, hands on approach. Many students stated that they liked that they received the knowledge in different forms in addition to it being reiterated several times to reinforce the concepts. It appealed to those who learn in different ways and across spectrums. What I did not expect is that some people preferred to be on zoom as opposed to being in person. I expected that everyone would want a more interactive approach, which was not the case.

IMPLICATIONS FOR FUTURE PRACTICE:
I hope that having the more objective quantative data to help bolster what we are seeing qualitatively. I think having more data to demonstrate how changes are being received will provide more insight into how the students feel. Additionally, this data being objective removes some amount of bias from a one on one interaction with the clerkship director which may color a student's response. I also think having some type of pretest/ posttest data would be helpful to determine what they are actually gaining knowledge wise from these new didactics.

TEACHING TIPS:

I think utilizing different methods to evaluate changes in addition to having different teaching techniques will bridge the gap for all the different learning styles.

Written by Joseph E. Mathias, MD
Associate Director
Outpatient Addiction Services
Emory Healthcare

TITLE:
Managing Opioid Use Disorder in a Medical Setting

CONTEXT:
My learners are 4th year Medical Students. The course will be held in a classroom setting in one of our group rooms at the Emory Addiction Outpatient Clinic.

SELECTED TEACHING & LEARNING TOPICS:
Gagne's Nine Events of Instruction: Hook 'Em, Teach 'Em, Assess 'Em.
Hook 'Em: Use a new way of gaining attention of the students. For example, using a visualization of a football stadium filled to capacity to illustrate the amount of individuals that died of an overdose over the past year.
Teach 'Em: During the didactic part of this course, I will use interactive polls throughout the lecture to keep students engaged.
Assess 'Em: Following the didactic, I will divide the students into small groups and pair each group with a faculty mentor. Each group will be assigned a clinical vignette for them to work through with the guidance of their mentor utilizing the knowledge they gained from the didactic. Each small group will then select a spokesperson to present their findings to the larger group.

LESSONS LEARNED:
I learned from previous attempts to teach this material that keeping students engaged for the entirety of the course is challenging. Although I have utilized effective Hook 'Em strategies in the past at the beginning of a lecture, I have not focused on continuing to engage students throughout the duration of the lecture. I think this piece will be vital to improve the quality of this course.

IMPLICATIONS FOR FUTURE PRACTICE:
I think the content of my course is very relevant and important for the knowledge base of future physicians. I hope to continue working on ways to present this material creatively to engage students. Furthermore, I would like to create a way to have this course on a virtual platform to allow other medical schools to utilize across the state of Georgia.

TEACHING TIPS:
Consider who your learners are. I think this is really important especially when thinking of ways to Hook 'Em, Team 'Em, and Assess 'Em. Also, do not be afraid to try new things!

Written by Ian McCullough, MD
Assistant Professor of Anesthesiology
Emory University School of Medicine

TITLE:
Teaching Anesthesiology intern's central venous catheter (CVC) insertion.

CONTEXT:
Anesthesiology interns graduate from medical school with a great deal of general medical knowledge. However, many have had little to no experience placing CVC's. With this in mind we created a training program to teach these new interns to place CVC's under ultrasound guidance.

This training program was a one-day course held over several hours in which new interns were taught about the technique, pertinent anatomy, and safety consideration of CVC placement. The session started with Didactics held in the classroom setting. Learners were subsequently allowed to practice placing CVC's in the internal jugular vein under ultrasound guidance on simulated patients.

SELECTED TEACHING & LEARNING TOPIC:

Learning Assessment Techniques
Prior to student having successfully completed the workshop they were required to do two things:

- Answer basic questions regarding central line anatomy as seen on ultrasound as well as insertion technique to the satisfaction of a proctor.
- Place a central line on a simulated patient under ultrasound guidance 1) successfully, 2) with no deviations from sterile technique, and 3) with no safety concerns.

LESSONS LEARNED:
During the hands on session we had eight interns and only two simulation stations. This produced a bottleneck with some of our learners becoming distracted when they were not the one actively placing a line.

In the future we will increase the number of hands on stations from two to four.

IMPLICATIONS FOR FUTURE PRACTICE
As previously mentioned, we will increase the number of simulation stations from two to four.

TEACHING TIPS:
Ensure that the simulation is as high fidelity as possible. We employed mannequins with pulsatile arteries so that residents would be able to visually distinguish between arteries and veins.

Written by Elisaveta Petrova-Geretto, PhD
Hubert H. Humphrey Fellow in Global Health
Rollins School of Public Health
Emory University

CONTEXT:

My learners are first semester, first year nursing students at the Faculty of Public Health. Presently, we are still teaching in hybrid environment, and it is up to the instructor to choose in person or online teaching. I personally prefer teaching in person as it allows for better interaction with my learners as I can 'read' the room and finetune my presentation to the specific audience and their reactions of understanding, lack of understanding, disbelief etc. (Un)fortunately, the cohort of 1st year nursing students is quite sizeable, and I was requested to hold my classes on 'Medical ethics and deontology' online, so I had online classes with 70 future nurses (out 150 cohort).

SELECTED TEACHING & LEARNING TOPIC:

Case study and Hook' em, Teach' em, Assess' em. Our discipline "Medical ethics and deontology" is considered 'soft', 'undemanding' and 'easy to pass' by students in addition to being taught by young, flexible instructors poses quite a challenge to attract and keep the attention of learners (compared to clinical disciplines) particularly in online, camera off settings. Thus, my efforts are directed not only towards teaching the Principles of Medical Ethics but also making learners' hearts pulse with the ethical dilemmas they will be encountering every day in their practice. I want to make sure that my learners understand that ethical behaviour, that is beyond their professional competences and legal requirements makes them professionals of the art and science of medicine, that is top professionals.

- In my first session I introduced the four principles of medical ethics by
- Hook' em – giving real examples of misconception about ethical principles that are widely circulating (and amplified by media) in Bulgarian society (I have researched on complaints and signals at the Executive Agency of Medical Audit/ Medical Supervision Agency).
- Teach'em- commenting on the historic and philosophical routes of present-day medical ethics in Code of conducts, Professional standards, Protocols of good medical practice, legal framework etc.
- Assess'em – provided three topics with multiple case studies from which teams of 5-7 students to choose, analyse, discuss and present to the group in the following class session. I further

specified that all students would give feedback on the work of their teammates- a very new concept in our faculty.

LESSONS LEARNED:

Initially, students reacted quite negatively to idea of working with teammates on a case and then presenting it- they are not used to it, they don't know each other yet etc, etc. Further, they didn't appreciate the idea of giving feedback on the work of their colleagues as it is not normal practice in our culture. However, after listening attentively, I concluded that 'protests' were not related to lack of experience, culturally new practice etc but simply with the displeasure from the extra workload- so I insisted on feedback. I learned that despite being 1st year students, learners have deeply ingrained teaching/learning expectations that I have to overcome, that is help them un-learn before they start learning again. Thus I need to spend more time on explaining why I chose the case-study/ feedback approach and how important the process of studying is and not only the results/outcomes.

I expected mixed results (few students providing feedback, 'formal' feedback, etc) and I was overwhelmed with the depth of the feedback comments and the gratitude for introducing a new, positive tool for reflection on work and cooperation.

IMPLICATIONS FOR FUTURE PRACTICE / TEACHING TIPS:

I will spend more time to explain why I insist on team work (pretty obvious but still), and on feedback. I will repeat it verbally and posted it on the course site.

Written by Debrah Rigg BSN RN OCN
Unit Nurse Educator
Hematology/Medical Oncology
Emory University Hospital-Midtown

TITLE:
Teaching 'The Winship Way' to Oncology Nurse Residents

CONTEXT:
The learners consisted of twelve (12) new nursing residents hired in the Oncology Nurse Residency Program at Winship Cancer Institute for the 2022-2023 fiscal year. The first introductory class was held at The Emory St Joseph's Learning Center in Classroom # 2. The desks were joined together but chairs were mobile. The use of Gagne's Nine Events of Instruction was used to create an environment that would facilitate engagement of the learners.

SELECTED TEACHING & LEARNING TOPIC:
I thought of using Gagne's Nine Events of Instruction focusing on the strategy - Hook 'em, Teach 'em, and Assess 'em. I applied these strategies for enhancing teaching and learning to an Oncology Nurse Residency Class with participants aging from 23- 38 years of age.

Hook 'em: The topic of the presentation was developed as the 'hook'. I thought about the participants driving down The Winship Way in their favorite car. I wondered if there were post- its in the shape of cars and so I checked online and found some and ordered for class. These were in a pack with different colors which made it easy for color code for group work - think pair share square discussion activity. A parking lot was needed for hands on activity for these cars to pull up to. One side of the wall in the classroom was ideal to park post- its. A PowerPoint presentation was created with picturesque settings. Road signs and relevant stops were embedded in the PowerPoint presentation to spike interest seeing that it was indeed 'A Ride down the Winship Way.'

Teach 'em: Baseline knowledge was ascertained by asking learners to write ideas on post it as to what their ideal customer service expectations would be if they were a patient or family of patient receiving cancer care. They were told they could write words or a concept on the post it. I walked around class to provide as much guidance as possible in the short time frame allotted. Learners were then asked to discuss their answers with the person next to them. Four persons then collected similar color post its which would be placed in parking lot for further application of knowledge.

Participants watched a video as well on 'The Winship Way.' After this video there was a 'Detour' slide in the PowerPoint. At the detour slide, learners were asked to share their life experiences on the way cancer care is done on their units as it relates to the video. This brought in some personal reflection and comparison of what is the current state on their unit and what the video depicted for 'The Winship Way.'

There was a slide with 'The Winship Way' framework with eight tenants that should be practiced. This aspect was done in a lecture/storytelling format giving life experiences I have encountered.

Assess 'em: After the presentation, a chart with the tenants of 'The Winship Way' was populated with the baseline ideas of learners which were written on post its and parked in the parking lot. Each post it was read and the learners indicated under which column or tenant the word or concept would fall based on their new knowledge. Learners were also given a reflective workshop survey which had a Likert scale on ratings of the class. The ratings received for the class ranged from good to excellent.

LESSONS LEARNED:

I learnt that even though you have a lesson plan, it is fluid. It may not go exactly as expected. Always take a look at the learning environment yourself before a teaching session. If not ask someone to take pictures or send a plan of the room. Some learners may not be engaged even if you try your best.

The class was a segment of a workshop and had other presenters so I did not have full control of some of the decisions as it relates to the setting. The PowerPoint was embedded in the workshop document with other presentations and printed as a handout. Resource links embedded in the presentation were not spelled out for a handout. Instead of a 'click here' link, next time I would write link address.

IMPLICATIONS FOR FUTURE PRACTICE:

Planning the Hook 'em section was very exciting. However, the slides with the road signs could have been less to have a better flow and less distraction from the content. Maybe I got carried away. The Think Pair Share Square was not totally achieved due to time constraints. The square segment was not square due to seating arrangement and allotted time. I would consider the type of class room desks in the future for work in groups of four. The room accommodated working in pairs more. It was at another session three weeks after where I saw the chairs on wheels were easily manipulated so learners could have easily turned around and face each other to form groups of four, but I figured that out late.

Some learners got a Eureka moment when they realized that some of what they were thinking before the presentation was actually on the ideal spectrum of the cancer care framework of The Winship Way. It was proven that some learners will bring more to the table based on previous knowledge and experience. When students were asked what their favorite car was,

only one person answered. This was supposed to be the icebreaker… Luckily the learners had name cards so I was able to call on a few to initiate participation. They were to imagine using their favorite the car to drive down The Winship Way! The first person who answered drew rims on her post-it car. This sole gesture made me feel like my Hook worked!

I will do this class again next year with another group of Oncology Nurse Residents and will pre arrange the seating to facilitate groups of two and then four. I will also use a worksheet with the pairs and then when they meet in the groups of four they use the post- its to transfer information and place in the parking lot. I had a lot of similar ideas and concepts from different persons which could have been collated as one. I would also get the learners to actually read their post- its and place under the category on chart.

Learners were all praised that their ideas and concepts fell under one category or another and their life experiences mentioned were all valid. There were no wrong answers. Affirmation was given to learners who mentioned their current state on their unit as bringing care to the patient which embodies 'The Winship Way'. They could relate more to the concepts and they indeed helped to bring the knowledge across through sharing their lived experience to those learners who were not at that stage as yet.

Persons utilizing this strategy should focus on getting the content and participatory exercises done in the time frame. Whilst we want to get the learners engaged, there should be a balance between the hook and content delivery. In other words too many hooks may not be good. One good hook is enough for a 30 min session.

Written by Irlande Robillard, DNP, RN
Interim Program Director of PB-RNR
(Post Baccalaureate Registered Nurse Residency), Atlanta VA Health Care Systems

TITLE:
IV placement strategies for Post Baccalaureate Nurse Residents (PB-RNR)

CONTEXT:
My learners are PB-RNR residents who are in 1 year residency programs. The clinical Setting for this mini teaching design will be on a medical surgical unit with Residents.

SELECTED TEACHING & LEARNING TOPIC:
My goal is to teach these RN residents how to insert IV in patients. They must start out by practicing on a dummy arm of different skin tones. I also teach them how to use vein finder to locate the right vein. This is a great tool often used in the clinic setting.

I spent 2 hours teaching RN Residents IV insertion techniques. I developed brief learning objectives, reviewed IV insertion strategies, and allowed them the opportunity to practice on dummy arms. I asked their colleagues to give each resident feedback, so people would feel comfortable sharing their thoughts and concerns.

LESSONS LEARNED:
I learned that people learn differently, some people need reading material as well as hands-on experience. Also, some individuals may need to practice several times before mastering the skills. For some of the nurses the vein mapping did not work for them and that they were more successful just feeling for the vein.

IMPLICATIONS FOR FUTURE PRACTICE:
I would use other teaching modalities. Sometimes simply explaining a procedure is not enough. I would incorporate videos during my teaching sessions. Instead of giving them feedback, I allowed their peers to give them feedback, this was less threatening. I think nurses learn better from their peers.

TEACHING TIPS
Knowing how to use the different vein finding equipment and there are many different tricks that can be employed for IV insertion such as using lidocaine because it prevents the veins from collapsing.

Written by Vivek Saroha, PhD
Assistant Professor
Neonatal-Perinatal Medicine
Emory University School of Medicine

TITLE:
Combination of multiple teaching strategies to address different learning styles in Neonatal Point of Care Ultrasound (POCUS) training.

CONTEXT:
My learners are Neonatal Fellows across the three years of training. Teaching/Learning setting: Combination of Asynchronous Prior learning and small group workshop.

SELECTED TEACHING & LEARNING TOPIC:
I had planned to use publicly available YouTube videos of neonatal cranial ultrasound scanning procedure as prior learning. The link for the YouTube videos was shared with the learners 2 weeks before the teaching session.

The workshop had three main components,

- A quiz with multiple choice questions based on the online material. The quiz was prepared and shared as a Microsoft Forms link which the trainees answered using their phone.
- Brief didactic review of the curriculum
- Hands on session on volunteer patients in the neonatal unit (with parental assent).

With this strategy, I had planned to address various learning styles in accordance with universal design of learning (UDL). The YouTube videos were intended as a **hook** to demonstrate ease and utility of the procedure. The Quiz was intended as a tool for stimulating recall of prior learning. The questions in the Quiz tested the knowledge and comprehension of anatomical landmarks and ultrasound appearance of the anatomy. The didactic session repeated the required knowledge and comprehension, whereas, the hands on workshop was intended as supervised initial application of the concepts learnt by the trainees. The teach **them** aspect of the UDL was therefore covered through the various asynchronous and synchronous strategies. The quiz and hands on supervised application doubled up as the **assess them** aspect of instructional design.

LESSONS TO BE LEARNED:
It was observed that the trainees performed unexpectedly poorly during the Quiz, whereas, during the hands-on session performed within a couple of hours later, their performance appeared significantly better.

There was no difference in the trainee performance with level of training among

the mix of fellows. The quiz therefore doubled up as a needs assessment demonstrating the similarities in requirements for all the trainees. The quiz also demonstrated that the use of a YouTube Video as asynchronous prior learning performed poorly.

IMPLICATIONS FOR FUTURE PRACTICE:

In the future sessions, I intend to retain the asynchronous prior learning component. I plan to modify it in the following aspects:

1. Using a quiz which will be a part of the recorded video. For this in intend to use a tool such as ***https://edpuzzle.com/*** for creation of engaging content where the trainees will not be permitted to skip the learning material.
2. Limiting the prior learning to a single video of duration less than 10 minutes focused on just the important learning objectives covering the knowledge and comprehension (remember and understand) aspect of the curriculum.

The quiz, didactic and hands on workshop performed well as a training and needs assessment tool. I intend to retain these components with following modifications:

Standardizing the quantification of the quiz scores to monitor the performance of trainees. This will help me to monitor the performance and identify improvement (or lack of) as the trainee repeats the curriculum annually. In addition, this will be a tool for continual needs assessment as the teaching program evolves.

This is a reminder to me that didactics and YouTube videos perform relatively poorly as a teaching tool for a skill-based learning goal such as POCUS. The hands-on workshop appeared to be the most effective tool for this objective and will continue to remain a significant component for other sessions.

Written by Sheel Shah, MD
Assistant Professor
Pediatric Pulmonology
Emory University School of Medicine and Children's Healthcare of Atlanta

TITLE:
Using Discussion-Based Methods for Learning Pulmonary Physiology Topics

CONTEXT:
Each academic year, there are 10 pulmonary physiology lectures that are taught throughout the year using Powerpoint slides via Zoom to the Pediatric Pulmonology Fellows at Emory University. The Powerpoint slides are presented in the same manner each year with initially learning about the pulmonary physiology topic(s) and subsequently answering multiple choice questions based on the topic(s). This leads to the pulmonary fellows learning about the same topic three times during their 3 year fellowship without much variation in the presentation mode.

Due to this, I would like to implement discussion-based learning (during the next academic year) with small group sessions in place of Powerpoint presentations.

SELECTED TEACHING & LEARNING TOPIC:
I have not implemented this project yet (awaiting the new academic year) but I would apply Learning Assessment Techniques. Specifically, I would use the background knowledge probe with 3-5 questions to assess the fellow's foundational knowledge. I would implement this via Survey Monkey to the 2nd and 3rd year fellows as they have already experienced the prior method of teaching using Powerpoint slides in the previous year. I would give a post session questionnaire to assess knowledge gained.

LESSONS LEARNED:
With not having implemented the discussion-based group sessions yet, I anticipate that initially things may not run as smoothly. I will likely need to provide bullet points/note cards of discussion topics for each small group so that important physiology topics/concepts are discussed.

It will be important for each small group to have at least 1 attending to help lead the discussions. However, there could be times that this may not be possible with busy schedules.

IMPLICATIONS FOR FUTURE PRACTICE:
Being flexible with each session and constantly reevaluating/possibly making changes every so often based on feedback. I would continue to use the background

knowledge probe as a measure of the pulmonary fellow's foundational knowledge and would recommend using this tool to someone considering applying it to their context. I would advise using the background knowledge probe but ensuring that that questions are answered prior to pre-reading about the topic and prior to the actual small group discussions.

Written by Marie Shockley, MD
Assistant Professor
Department of Gynecology and Obstetrics
Emory University School of Medicine

TITLE:
Video Curriculum to Augment Surgical Training in an OB/Gyn Residency Program

CONTEXT:
Since 2003, OB/Gyn residents have been limited to working, on average, 80 hours per week. During this time, they are expected to develop competency in both Obstetrics and Gynecology. This is no easy task, as achieving Gynecology proficiency requires minimum completion of a number of complex surgical procedures done by a variety of routes, including hysteroscopic, vaginal, open, laparoscopic and robotic surgery. With the advent of COVID-19, OB/Gyn residents' exposure to surgical procedures significantly decreased without a requisite decrease in the minimum number of procedures required for graduation from residency, rendering each experience in the operating room crucial for learning. Arguably, there was more pressure than ever before to ensure that each operative experience was robust and contributed to a meaningful way to a resident's development of surgical competency. It was within this setting that I partnered with another faculty member to create a video curriculum which was built on the premise that watching videos of live surgeries, in real-time, proctored by a skilled attending surgeon, may both prepare residents for in-person surgery and take the place of in-person surgery when it was not available (which was the case when elective surgeries were cancelled during the COVID-19 pandemic). As in-person surgical experiences are increasing back to pre-pandemic levels, I want to adapt this video curriculum, which takes place via Zoom every 6 weeks, to our current learning environment while ensuring that it remains relevant to the overarching goals of Emory's OB/Gyn residency program.

SELECTED TEACHING & LEARNING TOPIC:
- Development of clear learning outcomes (not just learning objectives)
- Applying SMART(TT) Method of goal setting for resident learners on Gynecology rotations participating in the video curriculum

LESSONS LEARNED:
Revising the surgical video curriculum is an ongoing process, as each video session is moderated by a different faculty member with specific expertise in the surgical

technique being presented. The session that I continue to lead is on total laparoscopic hysterectomy (I will deliver this module again in March 2023), but I am approaching my upcoming session differently than I have in the past. My involvement in the WHEA Teaching Fellowship has given me the opportunity to reflect on the specific content within this course. I have realized, for example, that my learners know the steps of a total laparoscopic hysterectomy, however, they cannot always describe how to optimize the operating room, select surgical equipment, position the patient, and communicate with the surgical team for safe and efficient execution of those steps. Ultimately, I have drafted precise learning outcomes for my portion of the video curriculum by systematically answering "What knowledge or skill will be new and essential to this course?"

IMPLICATIONS FOR FUTURE PRACTICE:

The intentional development of learning outcomes predicated on the SMART(TT) principle will also enable me to create an assessment tool for the video curriculum which will be essential to understanding if proctored and contextualized surgical videos are serving the residents' and residency program's needs. I am actively sharing the knowledge I have gleaned about writing learning outcomes with other instructors of the video curriculum and will match the mode of assessment for each session to the outcomes selected by each instructor. I believe that this approach will make the curriculum more successful (an outcome which can finally be measured!) than ever before.

Written by Sejal Tamakuwala, DO, FACOG
Assistant Professor
Associate Clerkship Director
Department of Gynecology and Obstetrics
Emory University School of Medicine

TITLE:
Incorporating low stakes assessment throughout teaching to assess learner understanding.

CONTEXT:
My learners are medical students (MS3). The teaching/learning setting is the classroom.

SELECTED TEACHING & LEARNING TOPIC:
Routine low stakes assessment (no impact on grades).
OBGYN clerkship medical students after expected to be prepared for case-based learning session (Postpartum hemorrhage) using asynchronous learning videos posted on CANVAS. After the case-based learning session, the students engage in a simulation activity on the same topic where they learn how to manage a postpartum hemorrhage case on a model. The simulation session is also very interactive which will help learners assess their baseline knowledge. At the end of the session, the students are split into two groups, and they engage in low stakes Jeopardy style game to assess their individual understanding of diagnosis and management of postpartum hemorrhage.

LESSONS LEARNED:
The learners were engaged throughout the entire afternoon session and got very competitive during the Jeopardy game. It clearly demonstrated that competition is a very effective teaching/learning strategy. Also, including different types of teaching techniques helped ensure that students with diverse learning styles can understand the same concept effectively.
We did not use buzzers during the jeopardy game which made it a little confusing to determine which group "buzzed" first. We ended up having a team leader raise their hand in the following sessions to indicate their team's readiness to answer the question and it seemed to work better.

IMPLICATIONS FOR FUTURE PRACTICE:
Some topics may not be conducive to simulation and in that case, any type of game can be used to assess learner understanding of the topic.

TEACHING TIPS:
It is very important to have pre-set rules for the game in advance so there is minimal feeling of "being cheated" among learners. Based on how each game progresses, you may have to alter questions/add more teaching elements early on for the next group of students.