A Novel Flipped-Classroom Curriculum for Intern Education

Shappell E, Ahn J/University of Chicago, Chicago, IL

**Background:** Traditional conference education emphasizes lecture-based instruction. However, evidence supports non-traditional classroom teaching for this generation of millennial learners. Also, the conference setting is used to achieve a common foundation of knowledge, but scheduling demands can limit conference attendance. We have addressed both of these challenges by developing a flipped-classroom curriculum with stand-alone asynchronous content.

**Educational Objectives:** We aim to achieve a common foundation of knowledge, skills and attitudes in interns using a flipped-classroom model. We focus on 25 topics common to all emergency medicine interns. We strive to produce interns uniformly comfortable with the management of each covered condition.

**Curricular Design:** A group of educators identified a need to provide core content for interns, the breadth of which required a longitudinal year-long design. A needs assessment across two separate EM programs confirmed the need for an intern curriculum (87% stated this would improve education) and learner interest in this format (84% favored dedicated conference time, 73% favored asynchronous resources). The 25 highest-rated topics by learners were chosen to be covered. We created a website to host asynchronous resources (EMFundamentals.blogspot.com). Each content page includes goals and objectives as well as references (e.g. journal articles, podcasts, institutional guidelines). For interns attending conference, faculty-led small-group sessions reinforced key concepts. For interns unable to attend, this web-based content delivery ensured a baseline knowledge. Current assessment methods include a post-curriculum attitudinal survey and pre/post knowledge quiz.

**Impact/Effectiveness:** This is our first year with full deployment of the curriculum; feedback from our pilot year is promising. 75% preferred the flipped-classroom model (versus traditional lecture) and 100% of users reported a positive impact from the asynchronous resources. The knowledge test for Kirkpatrick level 2 data has begun this year and plans to collect Kirkpatrick level 3 data via simulation are in development.

A Novel Game for Introducing Important Aspects of Effective Patient Consenting

Goodman G, Jones J/Alamance Regional Medical Center, Chapel Hill, NC; University of North Carolina, Chapel Hill, NC

**Background:** Informed consent is one of the most important tenets of modern medicine and has significant legal and ethical implications. Unfortunately during medical education there is little instruction on what makes up informed consent. Often the senior level resident teaches it, however topics like prior knowledge, therapeutic privilege, alternative treatments and expected outcomes without intervention are rarely discussed formally. This leaves the process of informed consent nebulous to the detriment of the patient and the provider.

**Educational Objectives:** To design a game that is both interactive and informative that teaches and instructs learners about the important aspects of informed consent and the specific odds that certain common ED procedures carry.

**Curricular Design:** EM residents are divided into groups of 4-5 residents. They are then given 5 scenarios which contain common ED procedures. Each scenario has two rounds. In the first each team lists what they believe are the risks, benefits, alternative treatments and expected outcomes without intervention. A discussion follows where teams debate which answers were correct. During this time the moderator helps facilitate a discussion based on what aspects of informed consent were covered and what that scenario was meant to highlight. Each correct answer is worth one point. The second round then requires the groups to guess the odds of common risks for the five scenarios’ procedures. The closest team gets three points. At the end of the game the team with the highest total wins.

**Impact/Effectiveness:** This game is designed to fill the gap in education regarding informed consent. By being interactive and engaging it is intended to stimulate thought about what important aspects of informed consent and the specific odds that certain common ED procedures carry.

A Novel Method to Monitor Participation for Individual Interactive Instruction

Khade J, Silverberg M/SUNY Downstate Medical Center, Brooklyn, NY

**Background:** Self-directed and small group sessions are an effective method to increase learning and knowledge. This case study measures the impact and level of engagement of both self-directed and small group sessions on knowledge retention for EM residents.

**Program Description:** This program is a year-long curriculum for EM residents at SUNY Downstate Medical Center. The program consists of a series of small group meetings which include formative assessments followed by self-directed online learning modules. The program is designed to enhance residents' knowledge and skills in specific areas of emergency medicine.

**Methods:** The assessment methods include pre- and post-tests, surveys, and focus groups. The pre-test is administered at the beginning of the program, and the post-test is administered at the end of the program. The surveys and focus groups are conducted throughout the program to gather feedback and assess the residents' satisfaction with the program.

**Results:** The results of the pre- and post-tests show a significant improvement in knowledge and skills for all residents. The surveys and focus groups indicate high levels of engagement and satisfaction with the program.

**Discussion:** The program is effective in improving residents' knowledge and skills. The self-directed and small group sessions are important components of the program. The program can be adapted for other specialties.

**Conclusion:** The program is successful in improving residents' knowledge and skills in emergency medicine. The self-directed and small group sessions are important components of the program. The program can be adapted for other specialties.