

## **General Section - 2015**

## E40 The Flipped Classroom — Turning Your Forensic Education Program Upside-Down

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After attending this presentation, attendees will be acquainted with the new blended-learning pedagogy movement, which is the art and science of teaching and learning, and learn how this pertains to the forensic sciences education community. Blended learning is a formal education program in which a student learns, at least in part, through online delivery of content and instruction. The Flipped Classroom format, a form of blended learning, demonstrates how students learn new content online by watching video lectures at home or in the office, and what used to be homework is now done in the classroom.

This presentation will impact the forensic science community by providing attendees with the knowledge and technical skills used to present academic content in a manner that best meets the needs and expectations of today's students. The Flipped Classroom blended-learning format provides flexible time and delivery for both the student and teacher; manages content quality control; engages students in the learning process; and satisfies the new teaching and learning pedagogy movement being experienced in our universities today.

The term "Flipped Classroom" has become something of a buzzword in the last several years, driven in part by high-profile publications in *The New York Times*, *The Chronicle of Higher Education*, and *Science*.<sup>1</sup> In essence, "flipping the classroom" means that students gain first exposure to new material outside of the classroom. This is usually accomplished via readings, lecture videos or YouTube® clips, and extensive online activities; students then use class time (live events) to do the harder work of assimilating that knowledge through laboratory experiences, problem-solving, discussion, case studies, and debates.

The advantages of the Flipped Classroom format is that it: (1) meets the needs and expectations of students today; (2) allows for maximum flexibility of time and delivery for both the instructor and students; (3) allows for the management of content quality control; (4) engages students in the learning process; and, (5) satisfies the new teaching and learning pedagogy movement that is sweeping the globe. For example, scheduled video lectures are not hampered by inclement weather, outside commitments, holidays, etc., so you are always on track. Video lectures are viewed on demand by the student 24/7 and therefore, reduce the in-class time requirements.

This presentation will highlight the positive outcomes achieved by "flipping" the forensic classroom and strategies used to rebuild forensic coursework derived from 36 years of teaching forensic sciences. In addition, the dynamics of rebuilding forensic coursework and a demonstration of the power of today's technologies to "make a difference" by "making it different" will be described.

## Reference:

1. The New York Times (Fitzpatrick, 2012); The Chronicle of Higher Education (Berrett, 2012); and Science (Mazur, 2009).

Pedagogy, Flipped Classroom, Blended Learning