## B164 Using Forensic Cases to Improve Ethical Reasoning Skills

*Lyndsie N. Ferrara, MS*, Duquesne University, 600 Forbes Avenue, Pittsburgh, PA 15219; and James B. Schreiber, PhD, Duquesne University, 600 Forbes Avenue, Pittsburgh, PA 15282*

After attending this presentation, attendees will understand how and why an ethical reasoning curriculum was created for forensic science students.

This presentation will impact the forensic science community by highlighting the importance of improving the ethical reasoning skills of forensic science students. This presentation will explore the ethical reasoning modules created and the classroom results. Particular focus will examine the way real-life cases are incorporated in the problem-based learning format.

The misconduct of Fred Zain, Annie Dookhan, Phillip Mills, and Sonja Farak still haunt the forensic science community. The misconduct performed by these individuals highlights the need for improved education focused on ethical reasoning and decision making. A pro-active educational approach provides students with the skills necessary to navigate ethical challenges in the workplace.

A national higher education organization, the Association of American Colleges and Universities (AAC&U), lists ethical reasoning and action as an essential learning outcome. Ethical reasoning skills are imperative for the successful navigation of career challenges. Ethics education is beyond right and wrong. Traditional ethics education is often recall-based. Students study theories and professional codes, but skill development is missing. Students need to be equipped with the skills to make ethical decisions.

A curriculum was designed to improve ethical reasoning skills for forensic science majors. Examples from pop culture along with real-life criminal cases highlight ethical reasoning in forensic science. The reasoning process and ethical dilemmas presented in the curriculum simulate real-life work. The curriculum is built as a developmental trajectory from understanding reasoning to activities that simulate decision making in real-life cases. This is a problem-based learning focus. Developing a problem-based learning curriculum in a module format engages students in an active learning process. Additionally, creating the modules in an online system allows for more detailed data analysis and expansion to a broader audience beyond a single classroom.

Multiple modules exist in the current ethical reasoning curriculum. First, the student is exposed to a brief philosophical background that provides a basic understanding of an individual's belief system and how new beliefs are created when confronted with genuine doubt. The next module explores the different types of reasoning methods. Students identify the three forms of reasoning in a variety of circumstances (i.e., text, video, and case descriptions). The next module further delineates the types of reasoning into multiple modes. Another module specifically focuses on the ethical theories and principles surrounding justice, privacy, and the common good. The role of these ethical principles as they relate to forensic science are explored. The modules use pop culture examples, from shows such as Monty Python and Sherlock Holmes, to introduce concepts before real-life examples are incorporated into the modules. The modules progress from simple to complex case examples. The use of real-life case examples is imperative for students to understand the impact of the forensic practitioner's actions. The module integrates the previous materials into full case studies that are completed by individuals or groups. These full cases present information at different times in the analysis in order to simulate how information is obtained in a case.

Results specifically from the module focused on reasoning types demonstrate students' abilities to understand and identify the three reasoning types. Detailed data analysis further illustrates questions in which students struggle. Additionally, specific skills tied to each assessment question indicate the level of student learning. The data analysis tools associated with the online system allow for detailed evaluation of student learning and provide constructive feedback for improved iterations of the modules.

**Ethics, Reasoning, Education**



*Presenting Author