



E98 Creating an Ethical Reasoning Curriculum for Forensic Science Majors

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

This presentation will impact the forensic science community by highlighting the importance of educating forensic science students on the use of abductive reasoning skills in order to promote ethical behavior.

The presentation will describe the development of each of the modules that are currently contained in the ethical reasoning curriculum. Additionally, preliminary results regarding the effectiveness of the modules to teach students about reasoning patterns and the connection between forensic science and ethical conduct will be presented.

The field of forensics uses evidence from a crime scene to develop scenarios regarding the how, what, why, and who of a criminal action. The way in which the forensic scientists or forensic investigators interact with this evidence or data can lead to ethical issues. Forensic science practitioners and investigators have a moral obligation to act in an ethical manner that promotes the common good through justice. The criminal justice system punishes those who commit crimes while protecting the innocent. Forensic scientists and investigators function as a facet of the government tasked with providing justice by solving crimes. Training individuals on best practices based on proper abductive reasoning patterns upholds ethical behavior that promotes/protects the common good and fosters justice for all.

Previous research focused on the reasoning of detectives involved in sexual assault and homicide cases. The information gathered from this research led to the development of an ethical reasoning curriculum. This information is presented in five online modules that can be shared across universities and organizations. Each unit outlines specific learning objectives, contains the educational information with examples, and provides practice.

The first unit focuses on the identification of the three different types of reasoning models: (1) abductive; (2) deductive; and, (3) inductive reasoning. The second module focuses on different learning models typically discussed in the forensic science program (e.g., behaviorism, cognitive information processing, cognitive bias). The next module connects the three types of reasoning with the applications in forensic science and forensic investigation. Activities in this module include transcripts from cases identified in the earlier research as well as materials and video clips from shows such as *Forensic Files* and *Dateline*. 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.

After the connection to forensic science, the next unit focuses on the ethical principles of common good and justice. The content and activities allow students to understand the role of various members within the criminal justice field (i.e., investigator, forensic scientist, lawyer, judge). The connection between proper practices and ethical behavior are emphasized. Students will understand the ethical obligation to uphold justice and promote the common good. The fifth module further discusses abductive reasoning and the six modes.¹ The module integrates the previous materials into full case studies 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.



Reference(s):

1. Shank, G., Cunningham D.J. (1996, April). *Modeling the six modes of Peircean abduction for educational purposes*. Paper presented at the annual meeting of the Midwest AI and Cognitive Science Conference, Bloomington, IN.
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