B1 Using Reports, Peer Review, and Administrative Reviews to Teach and Maintain Quality in Digital Forensics

Mark Pollitt, MS, University of Central Florida, PO Box 162367, Orlando, FL 32816-2367*

After attending this presentation, attendees will understand how to integrate a functional and managerial approach to teaching and implementing forensic report writing, peer review, and administrative reviews for digital forensic examiners in both traditional and non- traditional settings.

This presentation will impact the forensic science community by providing digital forensic examiners, their managers, and educators with a model that can be adapted to provide training, education, and process improvement in forensic report writing.

Arguably, forensic reports are the single most important document created in forensic science. These documents represent the culmination of the examiner's work and are the foundation for the legal use of the results of the examination. The quality of the written report is critical for the examiner's testimony and her professional reputation. The examiner's organization is likewise heavily invested in the report, as it "represents" the quality of the entire laboratory and the work of all examiners employed by the organization.

One of the traditional approaches to maintaining the quality of the forensic reports is to conduct reviews of the finished products by both peers and administrators. This process has long been accepted as a best practice by forensics managers and accrediting bodies. It is a process that has been followed for years.

It is therefore ironic that managers and examiners are often frustrated with the report writing and review process. Many managers will complain about the writing abilities of their examiners, but are seemingly unable to teach report writing skills effectively. Further, forensic customers such as investigators, lawyers, and jurists are sometimes critical of the reports provided by examiners. In the digital forensic discipline, this is especially difficult, as the methodologies are complex, the results are often voluminous, and the border between the investigative and the forensic can be fuzzy.

This paper will describe a methodology that has been developed in training both students of forensic science and practicing forensic examiners. The approach will combine a functional and a management approach. The former is focused on defining the structure of the forensic report based upon the forensic objectives and the requirements of the Federal Rules of Evidence. Since an effective peer or administrative review must have an objective standard or "measuring stick" against which to evaluate the report, the development of metrics for this purpose will be discussed. Since there are a great number of digital forensic practitioners who do not operate in traditional laboratories with the ready availability of peers and knowledgeable administrators, this presentation will discuss how reviews can be implemented in non-traditional settings.

Since the goals of peer and administrative reviews are a continuous process improvement, these approaches have application in academic,as well as, initial and recurrent examiner training. The author will discuss his observations of the effectiveness of this approach in training examiners as well as educating students.

Forensic Reports, Quality Management, Peer Review