F5 Building Bridges Between Science and Law

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After attending this presentation, attendees will understand the best practices and lessons learned from basic science education initiatives designed for the judicial and legal communities.

This presentation will impact the forensic science community by providing attendees with practical information that will assist in fostering successful science education initiatives and encourage participation in order to become part of the broader dialogue surrounding this issue.

In the wake of the 2009 National Academy of Sciences (NAS) Report, *Strengthening Forensic Science in the United States: A Path Forward*, much has been written and discussed concerning the need to improve the science literacy of judges and attorneys, but little practical advice has been offered to assist in developing programs that achieve this goal. New Mexico is emerging as a leader in this endeavor through collaborations between the New Mexico judiciary, Los Alamos National Laboratory (LANL), the University of New Mexico (UNM) School of Law, and the National Courts and Science Institute (NCSI). This presentation describes the education process taking shape in New Mexico, offers attendees best practices and lessons learned from these initiatives, and provides a potential model for others to employ.

Utilizing a unique collaboration between scientists, judges, attorneys, and educators, a basic science course was developed for the New Mexico judiciary that allows judges to exchange their robes for lab coats. The goal of the five-day program is to provide participants with knowledge and experience that enhances their ability to evaluate the admissibility of scientific evidence. This is accomplished through a combination of interactive lectures, tours, hands-on laboratory exercises, and mock hearings designed around the following objectives: (1) understand and apply basic experimental methods common to all scientific problem solving; (2) explore and practice analytical methods used to interpret data and understand its limits; (3) examine data from personal scientific investigations and formulate conclusions; (4) present, argue, and qualify conclusions and inferences based upon scientific data; and, (5) discover connections in methods and language between law and science. The small class size and hands-on immersion aspect of the class are critical elements of its success. Judicial participants are extremely enthusiastic about the value of this educational experience and the course is now expanding to a national audience.

In addition, members of the same multidisciplinary development team and alumni judges are bringing science literacy to prospective new attorneys. A highly interactive course was developed for the UNM School of Law addressing the use of scientific experts in litigation with an emphasis on relating science fundamentals to their appropriate and ethical courtroom application. Skill-building lectures address such things as the scientific method, error and uncertainty, and jumping the analytical gap to draw conclusions from data. Students apply this knowledge through motion practice, mock depositions, and admissibility hearings. Feedback from students attending the course this spring was very positive with comments that it was the most valuable and practical course that they had taken in law school.

These two successful initiatives were the product of multidisciplinary teams generating a distinctive synergy that greatly enhanced the product and experience. Along the way, course developers and instructors gained a profoundly new understanding of one another, which is reflected in their materials and presentations. This collaborative approach can serve as a model to those struggling with implementing science education at the grass roots level. The key is to assemble a diverse group of committed practitioners, develop goals and objectives, and simply begin.

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