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### Engaging Students Through Hands-on Active Learning

One attribute that I felt my own forensic educational program lacked as a student was the “doing” aspect, the hands-on experiences. As a student, I had the opportunity to hear about the instructor’s experiences and see some of these experiences through photographs, but my exposure to “doing” and practicing these skills was limited. I have used that deficiency as a driving force when considering curriculum development and changes. I took the best aspects of my educational learning experiences and wanted to make it better with a greater emphasis on active learning and hands-on experiences. To accomplish this goal, I incorporate numerous hands-on techniques and practicals to engage students with realistic critical thinking scenarios. This requires the balancing of utilizing several of our instructional facilities to include the outdoor forensic excavation facility, crime scene house/laboratory, FARO Forensic Lab, and the forensic science wet laboratory. This teaching methodology helps to ensure that students are receiving high quality instruction with the most real-world operational experiences possible.

For example, teaching crime science investigations can only be effective by having students conduct mock crime science investigations in which they systemically document and process mock crime scenes. I actively advocated for resources so that our Program could progress from using various rooms on campus to stage these scenes which were not realistic, to establish our current facility which is a real residential house (Crime Scene House/Laboratory) with bedrooms, kitchen, and living rooms; the rooms are also outfitted with cameras. This evolution allows me to place students in small intimate groups and effectively surveil every group at one time via cameras. I can view each step of their systematic approach and quickly intervene if students are off track or need assistance.



Forensic Science Program’s Crime Scene House/Laboratory Mock Crime Scene Practical

I believe this method of instruction is extremely successful and rewarding for me and the students. Typically, students are excited but nervous about their first mock crime scene practical. However, by promoting collaborative learning in their small groups to work through their crime scenes together, I’ve witnessed their growth as learners and a rise in their confidence. By the next mock crime scene practical which incorporates more complex elements and concepts, I feel assured that all the students have performed proper procedures and have put the class material into practice without hovering over them and allowing them the opportunity to problem solve as a group.

I believe that the emphasis on hands-on learning and having the students conduct a variety of forensic techniques assists in their success in obtaining forensic internships and jobs. Students don't just read and discuss these scientific and technical techniques in a textbook, they "do" these techniques. There is nothing more rewarding as an instructor than seeing your students obtain that dream forensic science job and put the skills and knowledge that you instilled in them to work and ultimately help someone on their worst day and provide justice to our community.