

Multidisciplinary Learning Using Mock Trials

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Abstract: In 2007, the Computer & Digital Forensics (C&DF), Criminal Justice (CJ), and Paralegal programs started to employ a mock trial to bring students from these three disciplines together. The event starts with a pre-planned crime scene. CJ students secure and process the crime scene, interview witnesses, and gather evidence. Digital devices are recovered and are forensically processed by the C&DF students. Investigative reports are forwarded to Paralegal students who work with local attorneys who act in the role of the prosecution and defence teams. A retired criminal court judge presides over the proceedings, complete with a jury selected from volunteers from the college community. For many students, this is the first trial scenario they have seen outside of television.

Keywords: Criminal justice education, digital forensics education, mock trial, paralegal education

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1 Introduction

Champlain College started an undergraduate degree program in Computer & Digital Forensics (C&DF) in 2003. Recognizing that digital forensics is a multidisciplinary field of study, the curriculum provides students with a good grounding in computer technology, networking, and criminal justice in addition to fundamental computer forensics and digital investigation courses (Kessler and Schirling, 2006). Digital forensics education requires a high degree of hands-on, interactive activities, which are enhanced by courses where C&DF students take courses with peers in other disciplines, such as Criminal Justice (CJ) and information technology programs.

It is common in the public sector for the criminal investigator to identify potentially relevant digital devices and turn those exhibits over to the computer forensics team, so that the investigator's next contact with the digital part of the case is when they receive the report. For that reason, reporting is often the most visible step outside of the computer forensics lab, and poor reporting or testimony can compromise even the best digital forensics examination.

To address the need for C&DF and CJ students to work together on processing a crime scene involving digital evidence, and to experience the big picture of a case from crime to verdict (à la an episode of *Law & Order*), Champlain College has started to employ a mock trial event that involves C&DF, CJ, and Paralegal students and faculty, as well as practicing attorneys and a retired judge. For many students, this is the first trial scenario they have seen outside of television, and the attorneys and judge ensure realism.

This paper will describe our experiences with the mock trial and the lessons learned. Section 2 will describe the process of designing the case scenario, preparing the evidence, and planning the trial. Sections 3 and 4 will describe the computer forensics aspects of the mock trial process from the CJ and C&DF perspectives, respectively. Section 5 will review our experiences and lessons learned, with future plans and changes to the academic curricula as a result of the mock trials covered in Section 6. Section 7 will provide some final conclusions.

2 Organizing the Mock Trial

As with any major project, the mock trial requires a lot of people and planning. Our goal was that only a few people would know the complete scenario and they, of course, could not be participants. All other players -- from the witnesses and investigators to the attorneys and judge -- would only have the information provided as it would have been in a "real" case. This section provides some details about the planning process itself, defining the various players, and setting the schedule.

2.1 The Case Scenario

One of the most important aspects of the trial, of course, hinges upon the case itself and here is where the bulk of the planning takes place. All other aspects of the case will follow from the crime scene that is devised.

In 2007, we created a homicide case. The scenario had two young men in a dorm lounge arguing over some drugs, resulting in one of them shooting and killing the other (Figure 1). Upstairs, another couple was asleep; awakened by the noise of the argument, they heard the shot and saw the suspect depart.



Figure 1: The crime scene

In 2008, the scenario was based on a real case that had occurred in the area some years ago. Here, a man travelled to Burlington to meet with a drug dealer; the two argued and the man severely beat the drug dealer. In this case, the victim's girlfriend and roommate were witnesses, although the girlfriend refused to testify.

During the planning, we actually treated both scenarios as if they had been made up. The CJ faculty assisted in determining what physical evidence should be found and collected at the scene and, as is usual at any crime scene, some of the materials had evidentiary value and some did not. The goal was that the investigators would collect whatever they thought was necessary to collect, obtain proper authorization from the Court to examine the seized materials, and then ascertain the evidentiary value of the exhibits upon receiving reports back from the "crime lab."

The faculty prepared information for the lab reports. As an example, in one scenario, the crime lab reported that an empty wine bottle found near the victim had a clear handprint of the victim upside down near the bottle's neck; the investigators needed to determine if this was an indication that the victim had held the bottle upside-down, using it to attack or threaten the suspect. Digital evidence was similarly prepared to fit the case; call histories and Short Message Service (SMS) messages were used to indicate a pattern of behaviour between the suspect and victim, but it was left to the investigator to put the pattern of information together.

It is critically important in this phase that the scenario planners not discuss any information with the mock trial players. Although some aspects of the mock trial are contrived, it is important that the investigation unfolds naturally and that the actions -- or inactions -- of the investigators play out.

2.2 Roles and Players

To ensure that the mock trial is a true learning experience, third and fourth year C&DF, CJ, and Paralegal students perform the active roles of crime scene investigation, digital forensics examination, and legal assistants, respectively. To ensure realism in the courtroom, practicing or retired judge and attorneys play those roles. Additional realism is added by use of a jury selected from the college community (including faculty, staff, and students).



Figure 2: CJ-student "criminal investigators" interviewing witness

The mock trial organizers work with the college's Performing Arts program to find actors willing to participate in the event. The only two players who receive any sort of briefing about what is to take place are the victim and suspect. When the scenario starts, they play their roles and any other players become true witnesses. No attempts are made to perfectly stage the incident, however. For example, during one of the past scenarios, the victim was wearing a USB thumb drive on a lanyard around his neck; after shooting the victim, the suspect

inexplicably took the thumb drive. This made the investigation much more interesting and even the suspect told us later that he took the thumb drive on a whim. In addition, during that same scenario, a college staff member just happened to be in a place to observe the "suspect" discard a weapon, thereby becoming an actual witness after the fact; he subsequently testified at the mock trial.

Two students are recruited from each of the C&DF, CJ, and Paralegal programs, each in their third or fourth year of study. The CJ majors, both of whom will have already taken courses in crime scene investigation and investigative interviewing, are assigned the roles of detective. Their job is to process the crime scene, interview witnesses (Figure 2), arrest a suspect, seize any exhibits thought to be relevant to the case, and prepare any necessary affidavits, subpoenas, and search warrants. They also need to prepare investigative notes for both the prosecution and defence, and be prepared to testify at trial.

The C&DF majors, both of whom will have taken Computer Forensics I and II as well as several CJ course, are assigned the task of performing the forensic examination and analysis of the digital devices seized from the scene, which includes two mobile phones and a USB thumb drive (details about the digital evidence can be found below). They work with the criminal investigators to ensure that the court orders for the digital devices are valid and also prepare reports of their examination.



Figure 3: From left: the defendant, defence attorney, and prosecution team (with paralegal student); members of jury are seen in the background

The Paralegal students work with the attorneys that form the defence and prosecution teams. The attorney roles are played by practicing lawyers from the area who have agreed to participate in the trial. Because of the nature of the event, not every aspect of a criminal trial is followed; in particular, the formal *voir dire* process of jury selection is skipped. The paralegal students, then, assemble the information necessary for trial and help the attorneys prepare the cases for the defence and prosecution (Figure 3).

2.3 Schedule

Planning the trial requires some long-term preparation and planning although it is not months of constant work. In our two experiments, we started by selecting the date for the trial and then scheduling all tasks backward from that date. Our class schedule is from early September to late April, with roughly a month off from mid-December to mid-January. A comfortable schedule and task list might look like:

- Assemble faculty advisers for initial planning meeting (1 October)
- Finalize crime scene scenario, identify players (21 October)
- Start to recruit students for crime scene actors, CJ investigators, C&DF examiners, and Paralegal legal assistants (1 November)
- Start to recruit attorneys and judge for mock trial (15 November)
- Stage the crime scene and initiate criminal investigation (21 January)
- Receive digital devices for examination (25 January)
- Advertise for jurors from the college (or greater) community (1 February)
- Digital forensics report provided to investigators (7 February)
- Complete investigative reports and provide for defence and prosecution team (15 February)
- Jury selection (21 February)
- Suppression hearing (1 March)
- Mock trial (15 March)

The end result is a mock trial event that is planned for roughly two hours, including testimony, jury deliberation, and verdict. Any pre-trial motions are discussed between counsel and the trial judge, and settled before the trial date; the motions are summarized at the beginning of the trial but not handled in real-time. Future trials will include a suppression hearing involving the paralegal, CJ, C&DF students as well as a judge.

3 Criminal Justice Students and the Digital Forensics Component of the Mock Trial

Criminal Justice students know that digital evidence is often the most important evidence in cases ranging from homicide and drug crimes to fraud and child luring. The mock trial process begins with CJ students gathering all of the evidence at the scene, possibly in cooperation with C&DF students for digital evidence specific issues. In the past, the defence and prosecution stipulated to certain evidence; in the future, there will be two "mock" judicial proceedings: a suppression hearing and jury trial.

3.1 Gathering the Evidence

CJ students serve two basic roles in gathering the crime scene evidence, including the digital evidence; they are the first responders and they are members of the team that plans and executes search warrants.

In our vernacular, *first responder* refers to the police officer that initially arrives on the scene and is responsible for securing the location, maintaining control, and

calling in additional resources (e.g., more law enforcement officers, emergency medical services personnel, etc.). In a planned future scenario, the first responder will find and seize a cell phone, learn of relevant e-mail and instant messaging exchanges, and then call the digital forensics responders. In this case, the first responding police officer will activate the phone in order to determine the phone's owner and will check the call history to see whether there had been recent calls to the victim. (It will be found that the phone's owner is the suspect in the case and that there were, in fact, calls made to the victim.)

This action will be the basis of a suppression motion since the defendant will claim that this constituted a warrantless search in violation of both U.S. and Vermont constitutional protections.

In this process, the CJ students learn to identify and apply recognized exceptions to the Fourth Amendment warrant requirement and to understand that these exceptions are now being re-examined in the context of cell phone searches. (As a case in point, one federal judge wrote recently: "To say that case law is substantially undeveloped as to what rights are accorded a cell phone's user . . . would be an understatement" [U.S. v. Skinner, 2007].)

In their role on the *search team*, the CJ students need to investigate the facts to develop the case. Facts vary by case; one scenario being planned shows that the victim carried on a large-scale marijuana sales operation via computer from an apartment that was shared with several other college students. The facts would show that the suspect in this case arranged to purchase drugs from the victim on several occasions via e-mail. Another scenario under consideration is that of a terrorist team who live in the same apartment; here, the investigators need to develop the reason for the victim being killed by the suspect.

The CJ students act as the investigating team that plans the drafting and execution of search warrants for the materials found at the crime scene and other premises (e.g., a suspect's computer might be located in another location or jurisdiction). The CJ and C&DF students work together to draft search warrants and supporting affidavits related to digital evidence and also consult with the paralegal students representing the prosecution. CJ students provide the information necessary to establish "probable cause," as well as any key words, terms, names, and time frames to help assure that the Fourth Amendment particularity requirement is met. CJ students will also give C&DF students specific information on the digital devices to be searched (e.g., quantity, type of device, and brand/model) and draft a protocol for execution of the search that is included in the affidavit and incorporated in the search warrant.

Once the judge issues the search warrants, the CJ and C&DF students execute the warrants, process the physical and digital evidence, and draw conclusions based upon what they find. The CJ students lead the overall investigation; the C&DF students' reports go to the CJ students, and they then turn the reports over to the paralegal students representing the prosecution and defence.

3.2 Suppression Motion

In the planned scenario, paralegal students working in concert with defence counsel will draft motions to suppress all of the digital evidence. The claim will be that the evidence was obtained in violation of the Fourth Amendment.

The first issue will be with respect to the "search" of the cell phone's call history. Paralegal students will file memos and debate at least two questions before a retired judge at the suppression hearing. First, does the Fourth Amendment even apply to some of the information recovered since the U.S. Supreme Court has held that there is no "reasonable expectation of privacy" in the phone numbers we call? Second, if the Fourth Amendment does apply, does the warrantless search done by the CJ student first responder fall within the search-incident-to-arrest exception to the search warrant requirement?

The CJ students will testify at the hearing and explain that the phone was activated and phone numbers checked in order to see whether there were recent calls to and/or from the victim. The CJ students will be examined and cross-examined by paralegal students acting as prosecutor and defence counsel.

The second issue will be with respect to whether law enforcement violated the Fourth Amendment when they executed a search warrant and searched the defendant's computer. The paralegal students will debate whether the digital evidence should be admitted at trial because the digital forensics experts will be unable to properly authenticate the printouts of digital evidence that they seek to enter into evidence, bringing up questions of best evidence. The defence is also likely to question whether the judge who granted the search warrant was mistaken when finding that there were sufficient facts and circumstances to prove a fair probability that the computer would contain evidence of the crime.

The computer forensics examiners who searched the computer will be required to testify and explain the steps they took to insure that they made an exact physical copy of the hard drive from defendant's computer. The prosecution must also explain how a reasonable juror could find that the e-mail exchanges recovered from the computer(s) and intended as evidence at the jury trial were, in fact, between the defendant and the victim.

3.3 Testimony

CJ and C&DF students who testify at the suppression hearing (and later at trial) will take an important first step in learning to explain how the investigative actions they took were consistent with the legal and technical training that is required of all police officers. They also learn the importance of responding clearly and directly to questions from the prosecutor as well as the importance of responding clearly, directly, and courteously under cross-examination from defence counsel.

3.4 Trial

Paralegal students will investigate and prepare witnesses (drawn from a pool of theatre students) for the local attorneys who have volunteered to act as prosecutors and defence counsel. These students will learn how important this preparation is when they hear "their" witnesses testify before a retired judge and twelve volunteer jurors.

For CJ and C&DF students, this is the first time they will see how evidence that they have worked and fought so hard to gather will be used by practicing prosecutors and defence attorneys to convince a real, impartial jury to either convict or acquit the person who has been charged with a crime. They will see and hear how defence counsel will attempt to spin mistakes in their investigation into

reasonable doubt. They will also see and hear how the prosecutor will respond by attempting to crush that doubt by pointing to the care that these student investigators took in their investigation and the extra effort they made to double check their work.

Finally, once they hear the jury's verdict on their work, the student investigators and witnesses will have an opportunity to question jurors. In this way, all participants can learn what pieces of evidence jurors found particularly compelling and what mistakes the investigators made, either in gathering evidence or in testifying, that were particularly damaging.

4 The Digital Forensics Component of the Mock Trial

Although not necessarily a major part of the trial itself, the examination of the digital evidence plays an important role in entire mock trial process and is, naturally, an important activity for the C&DF students. The digital evidence in the past has comprised three items, namely, two mobile phones and a USB thumb drive. In the future, digital evidence will include at least one hard drive image and, possibly, random access memory (RAM) images, as well. This section will describe some of the digital forensics aspects of the mock trial process.

4.1 Search Warrants

The Fourth Amendment to the U.S. Constitution guides the rules for how the state can search and seize evidence (state constitutions may further limit the procedures for local law enforcement). Although all of the digital devices could be seized at the crime scene, a search warrant was requested in order to actually examine the devices. There are a number of exceptions to the search warrant requirement, such as exigent circumstances, plain view, or consent. Absent those factors, police will obtain a warrant.

The role of the C&DF student examiners is to assist the CJ student investigators in obtaining a valid warrant. In particular, it means ensuring that the devices are properly identified and that the language properly describes the scope of the examination; i.e., obtaining permission to view all available information on the devices, including call history, contact list, SMS messages, data files, images, videos, and audio files.

The examiners also need to ensure compliance with the warrant prior to performing the actual exam. The examiners need to be sure that they are performing the exam within the time limits specified by the court, that the proper devices are being examined, and that the scope of the exam complies with the warrant. These points are particularly important in Vermont since this state has no "good faith" exception to errors in a search; e.g., if the police seize an LG phone and improperly identify it as an Ericsson phone, the court could invalidate a subsequent search.

4.2 Examination of the Mobile Phones

The mock trial evidence includes one mobile phone seized from the suspect and one found on or by the victim. Data on the phones are used to demonstrate that the victim and suspect:

- Knew each other, as evidenced by entries in the contact list, call history, and SMS messages
- Knew people in common, as shown by entries in the contact list
- Communicated with each other soon before the crime occurred, as evidenced by the call history and SMS messages

The two C&DF student examiners are responsible for examining the phones seized from the suspect and victim. The actual exam is supervised by an experienced mobile phone examiner (Figure 4), and the students follow the same process and procedures, and used the same hardware and software, as is used by local law enforcement.

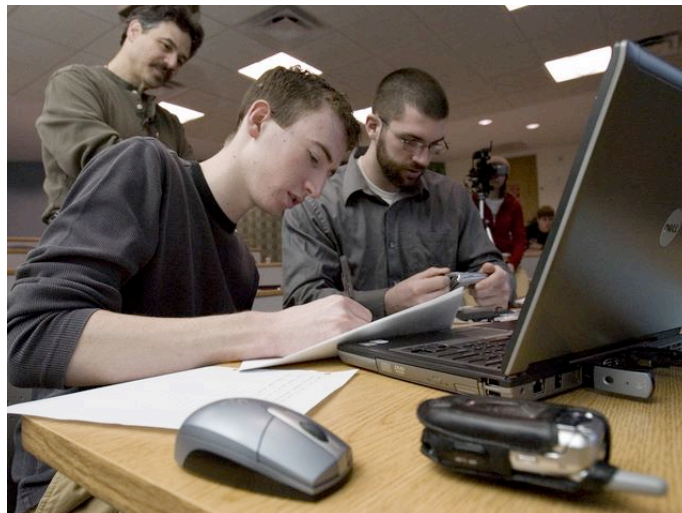


Figure 4: C&DF students examining a mobile phone (author Kessler in the background)

Although two mobile phones are seized during the investigation, a thorough exam is generally performed on only one of them, an LG VX 6300; this phone uses code-division multiple access (CDMA) technology and is examined using BitPim and MOBILedit! Forensics software. Only a single phone is examined because the phones do not contain real evidence; instead, we want the students to actually perform a mobile phone exam so that they can write an accurate report describing what they did and so that they could testify, if necessary, about how they examined the phones.

In fact, the cell phone evidence was created by other C&DF students and faculty to match the crime scenario. As part of the storyboard for the crime, a timeline of calls and SMS message exchange is created. Since MOBILedit! creates Extensible Markup Language (XML) reports, the XML files can be edited to insert appropriate evidentiary information into the report (Figure 5). This was one area

where the true examination did not yield "true" results. Student examiners write a report on the process that they used to examine the mobile phones and also provided the reports with the manufactured evidence. (See http://digitalforensics.champlain.edu/dfa/archives/MockTrial2007/Suspects_Cell_Phone_2007.zip and http://digitalforensics.champlain.edu/dfa/archives/MockTrial2007/Victims_Cell_Phone_2007.zip for sample phone reports.)



Figure 5: Mobile phone forensics report

4.3 Examination of the USB Thumb Drive

The final piece of digital evidence used in all scenarios is a USB thumb drive that ostensibly belonged to the victim. The thumb drive is contrived to have evidence that is, in fact, highly suggests ownership by the victim although not always found *on* the victim's person -- during the first mock trial, for example, the suspect improvised and took the thumb drive from the body of the victim; it was found by the investigators upon his arrest.

Creating the thumb drive evidence is straightforward. In one case, for example, three files were created: an e-mail from the victim's mother wishing him a happy birthday at some date in the recent past, a cover letter from the victim to a potential employer, and a spreadsheet containing dates, locations, names, amounts of money, and other information suggestive of drug dealing. In preparation for the mock trial, the thumb drive was completely wiped, the three files written to the drive, and the e-mail and cover letter deleted (not wiped) from the drive.

The student examiners, in compliance with a valid search warrant, image the thumb drive using AccessData's Forensic Toolkit (FTK) Imager and perform an

exam using FTK. Students then prepare a report detailing the device, the imaging process, results of the examination, and an analysis of the findings. (See http://digitalforensics.champlain.edu/dfa/archives/MockTrial2007/USB_Thumb_Drive.E01 for a sample thumb drive image.)

4.4 Impact of Digital Evidence on the Trial

The student computer forensics examiners have not yet testified in the mock court and, in fact, the digital evidence has been barely referenced during the court proceedings; as is so often the case, the prosecution introduced the digital evidence and the defence stipulated that it was accurate. Indeed, the defence claim in both past mock trials has been that the defendant was innocent of the charges and the digital evidence that was planted was purposefully vague enough so as not to be the "smoking gun."

The student examiners were disappointed in not being able to testify but they learned a valuable lesson; namely, while computers are increasingly the instrument, record keeper, and/or target of criminal activity, digital evidence is not always what leads to a conviction. Indeed, there are many high-profile cases where the digital evidence provides important directions for a criminal investigation even though it is not, in and of itself, damning beyond a reasonable doubt. A case in point well known to our students was the sexual assault and murder in October 2006 of Michelle Gardner-Quinn, a University of Vermont student. Gardner-Quinn just happened to use the cell phone of a man named Brian Rooney, whom she met in downtown Burlington on the morning when she disappeared. That single call was the only information that led police to interview Rooney, who later became a suspect and was eventually convicted of the crimes in May 2008 (Wikipedia, 2008). The cell phone information led police to Rooney but was not the reason that he was convicted.

4.5 Additional Types of Digital Evidence

The first two mock trials focused on the crime itself and the digital evidence was ancillary to the entire case. As planning commences for the third trial, there will be additional types of digital evidence and computer forensics will play a larger role.

As planned, the next case will require the CJ investigators to recognize that computers at the scene need to be seized and that they should request the assistance of the "on-call" computer forensics team to process evidence at the scene. The C&DF examiners will image a live computer system to obtain information in RAM and may even perform a live image of the hard drive. Helix and other first responder tools will be employed for this part of the process.

Another team of C&DF students will have already spent time preparing hard drive and RAM images that contain user names, passwords, e-mail accounts, documents, images, and other files that pertain to, and support, the crime scenario. In the case of e-mail exchanges, for example, students will need to employ two computers with which to engage in communication and the student examiners will need to analyze the images in order to link the two individuals. FTK, specialized RAM analysis tools, and other forensics software will be used to examine the images.

5 Experiences and Lessons Learned

Although we have only executed the mock trial event twice, many object lessons have already emerged for student participants and the organizers that are impacting future plans.

5.1 Lessons for the Students

For most students, the mock trial is the nearest thing that they have seen to a courtroom. The room is setup like a court, and the lawyers and judge ensure realism. Perhaps the best learning experience for all of the attendees is hearing the judge's instructions to the jury prior to their deliberations (Figure 6).



Figure 6: Vermont Superior Court Judge (ret.) Edward Cashman

Another important lesson for the students is to see first-hand the complexity of the actual investigative and trial processes. In particular, students learn how hard it is to testify in open court, professionally convey the proper message, describe technical details to a non-technical jury, and deal with a possibly hostile cross-examination.

Students also learn about the importance of thorough exams and that evidence does not always speak for itself to gain convictions. In the 2007 murder mock trial, detectives quickly focused their investigation on the suspect, a young man who

was a suspect only because of eyewitness identification. The detectives swabbed the suspect for gun shot residue (GSR), which was positive, which fit their theory that he was the shooter. Unfortunately, they did not swab the eyewitnesses for GSR, allowing the defence to raise the theory that one of them, in fact, shot the victim and that when the suspect came by for a pre-arranged meeting with the victim, he found the victim dead, panicked, and ran away with the gun. Indeed, even though the suspect really was the shooter, he was found not guilty.

Similarly, in the 2008 assault, eyewitness testimony was key because there was scant physical evidence; the prosecution contended that the suspect beat the victim with a tire iron and the defence maintained that the suspect was not even in Vermont at the time of the assault. The witnesses either gave inconclusive testimony or they lacked veracity so that reasonable doubt caused the jury to, again, find the suspect not guilty even though he actually did commit the crime. The lesson here was that eyewitnesses are often poor recorders of events and do not always make good witnesses; physical evidence is much less emotional and less able to be confused on a witness stand.

5.2 Lessons for the Organizers

As we settle into our third year of the mock trial, the organizers have realized and acted upon several lessons learned. First, because this project involves people from so many departments, and comprises students, faculty, staff, and volunteers, the trial needs to be treated like a major project, meaning an organizing team, a project manager, and a task list. The trial is fun and educational, but putting it together is serious business and requires some central management to coordinate events and to ensure that the evidence is in synch with the crime scene. As we plan our third year, we have appointed a student intern to be the project manager; working with the trial organizers, the project manager's primary job is to make sure that everyone meets their deadlines.

Second, we would like to make this more of a college community event. One obvious way to do this is via the college newspaper, where we can have a reporter write an article about the crime, the subsequent arrest, and the upcoming trial. It also provides a way to obtain a jury pool and, ultimately, report on the outcome of the trial. We would also like to use this as a way to open the event to the general public.

To accomplish these best practices, the organizing team needs to be supplemented by student volunteers who can see the project through for the academic year. That is the approach that we will try in the upcoming year.

Another plan for the future is to document the event and the planning. It is our hope that we can hire a videographer and create a video storyboard so that the process can be shared on a wider basis.

5.3 Application of Law

The scenarios that have been designed for the Champlain College mock trial exercises are venue-neutral and are crimes that could occur anywhere. In that respect, the exercise is transportable and this concept of a mock crime, investigation, and trial could be modified for any jurisdiction in any country. Since

the trial itself is not scripted, the outcome is in no way pre-determined and, therefore, can comply with any local or national law.

Our crime scenarios, for example, were planned so that local (i.e., Vermont state) criminal statutes would apply. A few changes to the scenario (e.g., possession of child pornography or large quantity of drugs) could have made this a federal crime. A few more tweaks could make the scenario and digital evidence methodologies apply to any other level of crime in any other country. Educators would, obviously, need to apply appropriate investigative techniques, digital investigative tools, legal requirements, courtroom procedures, etc., but the physical and digital evidence from the crime scene could remain basically the same for planning purposes.

6 Future Plans and Impact on Academic Programs

The first two mock trial experiences have proven to be such valuable experiences for the students that we have committed to continuing this as an annual event. The events have also made us recognize some deficiencies in CJ and C&DF program content.

Champlain College's C&DF program focuses on the digital forensics process rather than specific tools, with particular attention paid to written and oral communication such as preparation of affidavits for search warrants and examination report writing. What we have discovered in the process of the mock trials is that students are not specifically prepared to handle court depositions and testimony. Furthermore, no more than one C&DF student would be providing testimony in the mock trial in the best case and, by necessity, such testimony would be brief. To address this concern, the C&DF faculty have already put into place a new senior-level (fourth year) course that covers courtroom testimony, an essential skill for both the private and public sector analyst. We think that this makes a good capstone course, joining an internship experience and senior project in the last year of the program.

The mock trial organizers also recognized that digital evidence might not have been given its due in the early cases. Digital evidence has, in fact, been crucial in securing convictions in several high profile cases in Vermont over the past two or three years, including aggravated assault, robbery, kidnapping, and homicide. Given our experience in the preliminaries and project logistics, we decided to give digital evidence more of a key role at the next mock trial. C&DF students will learn what it means to be qualified as an expert as well as experience cross-examination. The primary focus of their testimony, both on direct and cross, will be on the reliability of the evidence that they have recovered.

While jurisdictions may differ about how to qualify an expert witness -- even in the U.S., state and federal courts may qualify experts using different guidelines -- courts throughout the world (including courts in the countries that do not have jury trials) are always concerned about the reliability of the evidence that they are asked to consider. C&DF students will be required to undertake the study, planning, and thought required to answer the basic question: "How can the trier-of-fact (i.e., judge and jury) be confident that this evidence *is* what you say it is and *says* what you say it does?"

Another lesson learned is that we found that we needed to have a course dedicated specifically to the emerging decisional law related to computers, technology, and networks. The CJ program has responded to this need with the development of a new course titled "The Law of Digital Evidence." Although only taught once as of this writing, it is proving to be a popular course with both CJ and C&DF majors as well as the faculty who are developing and instructing the course.

7 Acknowledgements

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