The Forensic Teacher Magazine

Summer 2015
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Special Kill the Principal Issue

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Summer is a funny time. If you’re wise enough to plan ahead you might be lucky enough to have weeks that drag by slowly like a wide, calm river as you soak in the silence and the love and the pleasure of just being. School is a million miles and a million years away. Then, gradually, a feeling begins to rise in you that maybe this next school year is going to be better than the last one. You’ve learned from your mistakes, you’ve figured out the next step to make your successes even bigger, and you just know how to handle that one that got stuck under your skin last time.

The beginning of a school year is always bittersweet. At least to me it was. On one hand you have to start getting up at an hour not of your choosing and wear clothes of the same ilk. Sleep-deprived, it always took me a couple weeks before I was present in my classroom the same time my body was, but my spirit showed up when I saw my first students.

They look lost or confused or bored or hesitant when they come through the door the first day, and each looks around as if to make sure there isn’t something dead and maggot-ridden in the room. A subtle shadow of relief (and sometimes disappointment) will cross each face as they take a seat. It’s like a new ride at a theme park: they’ve heard about it and it’s supposed to be sick, twisted, gross, and cool all at the same time. And some of them hope you’ll ease them into it gently and others want the maggots the first day, like a paper wristband at an amusement park.

And as you look at them you find yourself smiling inside. They have no idea where you’re going to take them, but you already know the trip will be better than it was last year. How do you know? Because this is what you do for a living. In every sense of the word you’re a professional. You’re the one who tries this or that at home and you’ve warned others not to.

Like the song says, “Hey there, you’re an All-Star, get your game on, go play!”

Dr. Mark Feil
The Forensic Teacher • Summer 2015

**CONGRATS!**

**Forensic News (continued on p. 23)**

Visit CSI: THE EXPERIENCE Web Adventures

http://forensics.rice.edu

**What teachers are saying**

- “I am delighted to have found your website. It brings all the content we teach together in such a real-life way. It’s fantastic! Thank you for an amazing resource!”

- “I found this a fascinating site. I went through the first case because I am assigning it to my students as part of a CSI unit. I can’t wait to do the other two cases. Thank you for making science fun.”

This work was supported in part by a grant from the National Science Foundation to the Fort Worth Museum of Science and History.
Book Reviews


South-Western Cengage Learning has teamed up with National Geographic Learning and Bud and Patty Bertino to raise the bar again for forensic education. The first edition of this book, published in 2008, was thoughtfully planned, laid out, and featured activities designed to engage both students and teachers. The second edition goes beyond.

Besides the liberal and expert use of color and graphics each chapter begins with an introduction and vocabulary list before moving into a historical perspective when applicable, information about the subject and collection and testing of evidence, classification, career advice for the chapter’s specialty, a review, open-ended questions, and activities or labs. Each chapter ends with a capstone project where students are able to demonstrate what they’ve learned. All are written to engage the reader regardless of their reading level. There are also activities via Forensic Science MindTap, an online, individually tailored learning environment that includes virtual labs as well. Another, inevitable addition to the text are suggested apps to augment each chapter’s concepts for students with smartphones.

If you’re lucky enough to have your school buy you a classroom set of this text you’ll also receive a CD with instructor’s resources including handouts, lesson plans, PowerPoints, presentations, and more. You’ll also have access to a flexible online system called Cognero that lets you customize multiple choice assessments from its huge database. Cengage also maintains a number of web resources specifically aimed to support users of this text to help them teach the subject as it relates to the book. If your school doesn’t want to make an investment of the size necessary to equip your classroom with books ask your department head to buy you the instructor’s copy. There are more ideas between its covers than you’re likely to know what to do with, whether you’re a forensic education veteran or a newbie. And, some of the online resources, like student sheets, are available for free download.

The experience and pedagogical skill of the authors is evident and Cengage and NatGeo put their muscle into highlighting this by allowing their thorough, yet engaging writing style to jump out at the reader.

The only flies in the ointment were the “Digging Deeper” features of every chapter. Each instructs the reader to go to a URL and search the Gale Forensic Science eCollection for more information. Unfortunately, the URL in the book directs the reader to a webpage about the book. You then click on the “Teacher Companion site” link and on the resulting page find the link to the Gale eCollection. From there the reader can enter a term in the search window, but the results are sometimes not as relevant or exhaustive as I would have liked.

Despite that, this is a text to make other forensic textbook publishers and
science department heads sit up and take notice. It doesn’t go into the depth a couple other high school textbooks we’ve seen do, but it definitely knows how to snag and hold the attention of the hormone-ridden, texting-savant, ADD adolescents who populate high school classrooms. And also that one kid in the corner.

A sample chapter can be examined at http://www.wadsworthmedia.com/marketing/sample_chapters/2015/9781305077119_CH06.pdf

Reviewed by Enrico Pelazzo


I was skeptical about this book when I saw the title. I thought, ‘Another book of lesson plans that attempts to put a CSI spin on the same topics covered in a high school chemistry class.’ And it is. And it isn’t. Not by a long shot. And that’s what’s so great about it.

The authors realized forensics as a theme in high school chemistry classes is underrepresented compared to high school biology classes. There’s not a lot in a chemistry course that can be directly applied to the field of forensics without stretching, and losing a degree of student interest. So, the authors set out to change that.

STEM programs are the prodigal son of secondary education, and the most fascinating of these combine forensics into their curriculum. Students love applying what they know or what they’re learning to solve puzzles. But one big problem with forensic connections into the curriculum is that the forensics units are often unrelated to each other, which can result in a loss of student interest over time. Add to this a lack of confidence in forensics on the teacher’s part and the fact that, as the authors say, “no complete source of information exists that is aimed at a high school level, much less a hands-on, inquiry-based descriptive text or manual,” and you don’t have much of a chance to make Chem 201 like CSI.

So, the authors set out to solve these problems.

Forensics in Chemistry is the whole package, soup to nuts. A chemistry teacher who decides to use this resource will have everything they need to tie high-level topics like advanced stoichiometry, Beer’s Law, nuclear chemistry, electrochemistry, equilibrium, acids and bases, and organic chemistry to a murder mystery. And the beautiful part about it is students will work on different clues and parts of the mystery over the course of the school year as they gather evidence. Each lesson and lab draws on the others and is related not only to the advanced topics mentioned above, but on the growing file of evidence the students accumulate.

Each chapter includes national standards and chemistry content addressed in the performance assessments, as well as a teacher’s guide, the performance assessment students will be asked to complete, a suspect file, a student lab report example, pacing suggestions, and a rubric. Reproducibles in each chapter feature data sheets, graphing paper, calculation guidelines, discussion questions, and much more. Plus, online resources are given near the beginning of the book for downloadable PDFs for student assessment handouts, teacher guides, and grading rubrics for each lesson in the book.

If a high school chemistry teacher takes the time to read through this book before planning their next advanced or second year chemistry course they’ll be amazed at how seamlessly the lessons blend not only to their curriculum, but to their plan to let their students solve a murder mystery, too. And the answer to the mystery isn’t one that’s easily guessed at, but one that comes together piece by piece over the course of the school year. Well, eight hands-on, week-long labs that are woven into an existing curriculum.

The book can be purchased directly from NSTA press at nsta.org for $20.76 for NSTA members and $25.95 for nonmembers. And then there’s $8.49 shipping for the continental US. If you order from Amazon and you’re an Amazon Prime member, or your entire order is at least $35, shipping is free.

I wish my chemistry teachers had had access to this book when I was in high school. Advanced chemistry topics were boring and demonstrated no relevance to real life, and there was little or no feeling of accomplishment when I finished each. This book provides high school chemistry teachers willing to put in the planning with all the tools they need to make their courses not only cool, but something students will want to excel in. There is so much more to say about this book, but seeing is believing, and if you’re teaching the topics mentioned above it’s criminal to not take a look.

Reviewed by Enrico Pelazzo
The Evidence Is In

Forensic Science classes excel with the new 2nd Edition of *Forensic Science: Fundamentals and Investigations*.

- MindTap digital learning platform with enhanced virtual labs
- Enhanced and updated lab activities and Capstone Projects
- New entomology chapter and more crime scene investigation coverage

Request a sample copy today
NGL.Cengage.com/ForensicScience
**Cell Records Not Private**

A federal appeals court ruled recently that the government does not need a warrant to get a suspect’s cell phone location information. The court ruled that information collected by cell phone towers regarding the location of cell phone users are considered “business records” by a “third party” so the Fourth Amendment doesn’t apply. So, the Feds can track your phone’s movements on the fly even if they don’t have a warrant to listen in.

**Some Cancer Treatments Remove Fingerprints**

The *New England Journal of Medicine* reported a small group of patients have lost their fingerprints because of a freak side effect of some chemo drugs. Hand-Foot Syndrome affects more than half of patients taking chemo and usually results in swelling of the hands and feet. In some, however, their fingerprints vanish which presents problems with certain cell phones and security operations that depend on them.

**Fingerprint Photograph Leads To Arrest**

Detectives in Sarasota, FL got a tip Dannie Horner was making porn with a 1-year old boy. They needed evidence and Horner gave them his phone. On it detectives found a photo of a boy being abused. The man’s face wasn’t in the photo, but his hand was. Since the photograph was ultrahigh resolution they used a computer to enhance it and were able to obtain an image of a fingerprint, which matched Horner’s.

**Forensics Solve 400 Year Old Mystery**

Scientists have identified four leaders of Jamestown, one of the first settlements in the New World. Nearly 30% of each skeleton remained and scientists used anthropology, chemical analysis, 3-D computer modeling, and genealogical digging to figure out who was who.

**Boosting Memory Recall**

Scientists at the University of Surrey have shown that establishing a rapport with a witness puts them at ease and they’ll be better able to recall details from something they witnessed. And, closing one’s eyes while trying to remember what one saw significantly helped recall. Their study, published in the journal *Legal and Criminology Psychology* showed doing both gave the best results.

**Twin DNA Not So Identical**

As we age environmental factors cause our DNA to undergo mutations, called methylations, in response to different environments and habits. It is now possible to collect DNA from a crime scene, then DNA from both identical twins and compare methylation rates. Dr. Graham Williams from the University of Huddersfield in the UK found the process of high-resolution melt curve analysis (HRMA) melts the DNA in question, and if one DNA sample is more methylated it will melt at a different temperature than the other.

**Cheaper, Easier DNA Testing**

Obtaining DNA from hairs recovered at a crime scene has long been expensive and usually unsuccessful. Recently, however, Australian researchers demonstrated a much higher rate of success when they focused on trace DNA on the hairs instead of the usual method of examining flesh at the base of the hair where it was pulled out. Their work was published recently in the journal *Forensic Science, Medicine and Pathology*. They demonstrated DNA profiles comparable to regular methods with no loss of accuracy. Further, their methods can be performed in basic laboratories instead of the high budget, specialized facilities normally reserved for such work.

**Public Hair Gets A Boost**

Australian scientists published a study in the journal *Investigative Genetics* that explored the fact that while pubic hairs represent choice evidence for sexual assault cases, the bacteria living on them may tell a better story. Different parts of the human body support different ecosystems of bacteria and those living on pubic hairs are more likely to be left at the scene of a sexual assault than pubic hairs themselves. Over 70 different varieties of microbes live on pubic hairs and the transfer of some of them can help identify a suspect in a rape case if his ecosystem matches the sample.

**Fingerprints Reveal Drug Use**

Published in the journal *Analyst*, a multinational group of scientists have demonstrated a new, noninvasive test for cocaine from a fingerprint. This sounds obvious, but their method differentiates between cocaine that has been touched and cocaine that’s been ingested. As cocaine breaks down in the body, the user secretes metabolites through the skin and these chemicals can be detected after the fingerprint is sprayed with a solvent and the result fed into a mass spectrometer.

**Fracture Prints Rival Fingerprints**

Dr. Roger Haut and Dr. Todd Fenton have discovered skull fractures, particularly those in children, display specific signatures of breakage. A single blow to the head may cause other fractures besides the one at the point of impact. Likewise, they’ve found that not all fractures begin at the impact point. By combining their findings with a computer algorithm by Anil Jain they’ve been able to get a 95% accuracy rate on blind fracture injuries on piglet skulls. This is important because when an infant or young child presents with a fractured skull physicians often have little to go on besides the parents’ account of events. The findings give investigators a tool to increase the odds of assessing how the child was injured.
Mini-Mystery

THE CASE OF THE FORGED WILL

Thomas P Stanwick could not help marveling at the contrast between the offices of his two closest police friends, Inspector Matthew Walker of the Royston Police and Inspector Gilbert Bodwin of Scotland Yard. Walker’s office was chronically cluttered, but Bodwin kept his scrupulously tidy. Just a matter of working style, Stanwick concluded as he looked around Bodwin’s office once more.

“I’ll be in London for ten days,” Stanwick remarked to Bodwin, who was seated behind his desk. “See the old sights, hit the theaters and the bookshops. Then to Cambridge for a few days, then to the East Anglia countryside to see the Earl, and finally to Edinburgh for a logic conference.”

“Sounds appalling.” said Bodwin with a wry smile. “What gets discussed at a logic conference?”

“The topic this year is the assumption of existential import and its effect on Aristotle’s traditional square of opposition. Riveting stuff, I assure you. So anything exciting at the Yard these days?”

“Nothing to match Aristotle. Aman died last month and turned out to have a forged will.”

“A will, eh?” Stanwick leaned back and cupped his hands behind his head. “Is there much money involved?”

“There is, actually. Several millions. Freddie Teti made a pile as a software entrepreneur and popped off recently at fifty-two with a chronic blood disease.”

“Doesn’t sound like a murder, anyway.”

“No. Teti’s solicitor, William Chellman, became suspicious of the will when he found that it left Teti’s estate to three relatives. Chellman tells us that he had drawn up a will for Teti several years earlier that left his entire fortune to a medical foundation. Teti had kept the will on file at his home and not left Chellman a copy. “Shortly before his death,” Bodwin continued, “Teti said to Chellman that the bequest to the foundation might be the best, as well as the last, thing he ever did. Yet when Chellman found the will in Teti’s home files, it left everything equally to a cousin, a niece, and a nephew. Chellman says he is sure that Teti would have had him draw up any revised will. So he called us in.”

“Has your lab examined the will?” asked Stanwick.

“Yes. The critical pages are of newer paper than the rest, when a revised will would normally have been entirely reprinted. Also, our handwriting people believe that the signatures on the last page are forged.”

“I see. And who are the surprise-and possibly surprised beneficiaries?”

“Teti’s cousin is Arthur Dietzel, a major in the American army,” said Bodwin. “Teti’s aunt married a Yank, you see. He’s 48, and was stationed in London last year at the American Embassy. The nephew, John Manning, is also an American. Teti’s sister carried on the family tradition of marrying across the pond. He’s 25, and is working on a doctoral thesis in geology.”

“And the niece?”

“Barbara Teti is British, oddly enough. Daughter of Teti’s brother, age 27, and a commercial pilot.”

“Perhaps she then had the most opportunities to visit her uncle,” Stanwick remarked.

“Perhaps, but we know that the major visited Teti in March of ’01 just fourteen months ago, and that Manning spent a week with his uncle in September. All three of them spent a few days with Teti at Christmastime.”

“May I see the will?”

“If you like. The lab is done with it. It’s there on the table.”

Stanwick strode to a side table and carefully turned over the pages of the will.

“A will, eh?” Stanwick peered closely at the last page. “I see it was signed ‘of my own free will this 11th day of February, 2001’ purportedly by Teti and then two witnesses whose scribbles I can’t read. The forgery would have occurred on or after the given date, of course. And all three beneficiaries were known to have stayed with Teti between that date and Teti’s death.”

“Precisely.”

A crisp knock on Bodwin’s door was followed by the entry of a sergeant bearing a slip of paper.

“Thought you should see this, sir,” the sergeant said to Bodwin. “I had another look in Mr. Teti’s file cabinet, and found this in the bottom of the folder where the will had been kept.”

“Thank you, Fogg,” said Bodwin. “Let’s see. Handwritten in blue ink on white paper. ‘Will revised 2/11/01. Sole copy. F. T., Well! That would seem to eliminate one of our suspects.”

“Even better.” Stanwick smiled. “I think it eliminates two.”

What suspect was left, and why? Solution on page 33.

Stan Smith was the author of three books of Stanwick mini-mysteries that have been published in nine languages and sold over 120,000 copies.
Hot Sites

http://aboutforensics.co.uk/
A wonderfully thorough and visually smooth place to go if you have any questions about forensics. This would be a great place to send students on a webquest.

The FBI worked overtime to produce this scrapbook about its history. You can save the webpage as a PDF for later reading. It’s colorful, it’s to the point, and none of the really cool tales are longer than one page. Definitely something to savor.

http://www.pbs.org/wgbh/nova/education/resources/subj_04_01.html
The folks at NOVA have always produced quality work and this website is no exception. Seriously. Make sure to explore the Teacher’s Guides By Subject at the right side of the screen.

http://fepac-edu.org/accredited-universities
If any of your students (or you) want a degree in forensic science this is the site to visit for information about accredited programs.

http://www.forensicsciencesimplified.org/
A great place to learn about forensics for someone wanting to get up to speed quickly. Send new students here for a webquest. Don’t forget to check out the “Find Out More” sidebar in every subject for the full experience.

http://www.forensicsciencedegree.org/top-websites-to-bookmark/
If you don’t look through this list of top 100 forensic websites it means you’re out of rigor and have 2nd stage instars on your arms. Only the dead wouldn’t look through this list. Or brain dead.

http://www.pbs.org/wgbh/americanexperience/films/poisoners/player/
If you’ve never seen The Poisoner’s Handbook you’ve missed out on a real treat. It’s a great movie about the dawn of forensic toxicology in New York City.

Do you have a topic you’d like us to cover?

Email us, tell us about it!

admin@theforensicteacher.com

www.theforensicteacher.com
We’re used to seeing the FBI on TV and in the movies—after all, they’re the quintessential good guys, the ones we can always trust, the ones who always look out for the average Joe. They’re hard core and they’ve got the labs, the special agents, and guns and manpower and dedication to get the job done. Everyone knows all about the FBI, right?

Not so fast, speedy.

Yes, the FBI takes on the mob, terrorists, witness protection, and all sorts of other things you can’t imagine because you never hear about it. But did you know that in real life you can do felony jail time for lying to an FBI agent just once? Did you know each agent has to qualify with their sidearm every year, and they have to wear it all the time? Did you know some of what you see in movies, books, and on TV about the FBI is pure Hollywood? We didn’t until we began digging.

Where do writers, producers, and film and television executives find out how far their FBI characters can go in pursuit of catching bad guys? To the FBI’s Office of Public Affairs, that’s where. We were fortunate enough to get Special Agent Mike Kortan, Assistant Director for Public Affairs on the phone to answer some questions for us about what’s true and what’s not about how Mr. Hoover’s agency is portrayed to the public.

You might be surprised.

**Forensic Teacher:** Hi Mike, thank you very much for taking the time out of your busy schedule to talk with me today.

**Mike Kortan:** Thanks for showing an interest in us. I’m not real familiar with the magazine, but I’m looking forward to seeing it.

**FT:** Great. First, a little bit about our magazine: we’re for teachers, by teachers. Forensics is hot in high schools and in colleges. And unfortunately, when I was teaching forensics at the high school level I realized at a training conference that everybody there had to reinvent the wheel. By that I mean there’s no one central place where teachers can learn how to make fake blood, set up a crime scene, instruct students on the proper way to prepare slides, or even just look at hairs or fibers. I have a publishing background from our college newspaper so I said to my wife, ‘why don’t we start a magazine and we’ll do it under two conditions: 1) we don’t use any of our own money, and 2) it’s free for teachers. And it worked. Advertisers paid the costs of publication and we printed on paper for three years, but then prices went up and the economy went down so now we’re digital. And that’s a good thing because all the links in the articles are live and all the embedded movies play with a click of the mouse. Sales of CDs keep us alive.

**MK:** Sounds good.

**FT:** So, it occurred to me that because of TV and movies pretty much everyone thinks they know all about the FBI. So, I thought it would be neat to go behind the scenes of the real FBI as it relates to popular media and the place to start would be with you guys, the FBI’s Office of Public Affairs. I wanted to know how far authors and moviemakers can stretch the truth. Ready?

**MK:** Sure.

**FT:** Do authors or TV or filmmakers need permission to write or make a story about the FBI?

**MK:** No, they really don’t. The FBI has accepted that it’s out in the public domain, and we’re so widely and commonly depicted that it’s become pretty routine. There is, technically, an issue with the use of our seal and credentials—we try to control that so they’re not copied or mimicked too accurately, which could lead to some other problems. With respect to the authenticity of the—well, the FBI has become Americana and it’s just out there so often now.

**FT:** Wonderful. I did notice on some of the FBI shows on TV that someone will introduce themselves and say, “I’m Special Agent Johnson” while on a different show they’ll say, “I’m Agent Burke.” It is “special agent” in real life?

**MK:** It is “Special Agent,” that’s the title, that’s what’s on everybody’s credentials. It’s oftentimes shortened to “Agent,” but “Special Agent” is the title.

**FT:** What sort of requests do you get most often?

**MK:** We get a wide range of requests and interests, everything from ideas in their infancy for a simple project to any degree of developed storyline, you know, scripts or whatever the medium is and everything in between. So, they come to us from all directions with all kinds of requests and

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By Mark R. Feil, Ed.D.
we have a relatively small staff that’s able to consider them, but we do everything we can to be responsive. We prioritize, we try to assess what projects might have greater urgency than other projects and try to dedicate our resources accordingly.

**FT:** Sure. How many of you are there in the office?

**MK:** In that particular division of the office it’s really just a handful of people, four or five, in fact. They’re doing other things. We get a share of the responsibilities of that office with the same folks who assist with crime publicity. So, they wear other hats. But it’s interesting to say that a lot of the American public does and has for generations now relied on popular media, or entertainment media to learn about the FBI. Not necessarily by design, but that’s the effect. When you’re watching shows or movies or reading books or whatever it may be that’s often the biggest impact on the American public in terms of who the FBI is.

**FT:** Oh, yeah. How many contacts or requests would you say you get every week or month or year?

**MK:** That’s a term we use for current projects we’re working on. We open things, we close things, so 200 represents a snapshot in time for what we may have in play right now. That can go up a little, go down a little, but the number tends to stay near that range. And we do what we can. Some are bigger projects than others; some may be a little fact checking or information provided, and others may be multiple episodes or a more in-depth relationship. Let me make a couple things clear: as part of Public Affairs we’re guided by the kind of information we can provide the public or to those representing the public, so we don’t provide these projects any more information than we could give you or any member of the public. We try to be responsive, we try either to give them information or point them to places where they can get their own information or more in-depth information.

**FT:** When you watch TV or go to the movies and there are FBI agents on the screen, what’s the single, most irritating thing you see that makes you say, “Nooooooo?”

**MK:** That’s a good question. There have probably been a couple areas. On television, when there’s anything medical or with the law it’s depicted differently—things appear to be simpler and faster than they really are. When you tell a story you have to move things along and you cut to the more interesting aspects of that process. Of course, in real life, things take much longer and they’re more tedious, more boring or even unsuccessful, whereas on TV and in movies you tend to see the cream of the crop—things move along quickly, and everything just sort of works. And maybe that’s not such a bad frustration because we’re depicted positively, and I think that gives confidence to viewers that we know what we’re doing. That’s probably one area.

The other is the murkiness or the confusion over the FBI’s jurisdiction. As an agency we have a pretty well defined jurisdiction, the kinds of things we can investigate or get involved in. Oftentimes, popular media depicts us investigating crimes we don’t really have jurisdiction over. We don’t really investigate everyday crimes that the police do. They have us investigating big, serious crimes that, somehow, the police can’t handle on their own.

**FT:** There was a show that ended last year called *Without a Trace* where someone goes missing for twelve hours and suddenly the FBI is on it, and I’m thinking, ‘wait a minute—you can’t file a missing person report for 72 hours.’
MK: Exactly, you have to move things along. And there’s our relationship with state and local law enforcement.

FT: Yes!

MK: How many times have you seen on TV and in the movies where we come in, and we elbow our way in, and we don’t get along and just take over the case? All these kinds of things. That was never entirely true. I’m not saying there’s not friction from time to time, but we’ve worked hard over a period of time to try to dispel that notion because, in fact, we work side-by-side with task forces in all investigative areas. The idea that we’re in competition or something is a myth.

FT: I have seen those movies.

MK: But there’s one other area, I guess I’ve saved the best for last, is the frustration over the CSI effect, that science just moves along, science solves everything. You get some evidence, some forensic evidence somehow and that’s all you need to solve the crime quickly. In fact, science is critically important, but it’s one piece of a complicated or messy puzzle that is put into the mix with a number of other things to advance an investigation or a case.

FT: I’ve seen the shows where the FBI comes barging in and elbows the local cops out of the way, but on the flip side you have shows like Criminal Minds where there’s two murders with the same MO, so wheels up in 30; they fly off in their happy, little, private jet that all FBI agents are able to take advantage of, and they land in the destination city and the police department begs the agents to help them. I think it’s funny because it’s so opposite of the other offerings on TV and in the movies. Either the FBI is elbowing their way in or the clueless locals are waiting for the FBI to ride in and save the day.

MK: When you describe it that way, and you’re right, the Zimbalist show showed an element of that where he was deployed every week to a different part of the country to help with a case, you know, somehow he could step in and help the cops. So, it’s funny there’s a little bit of carry-over from a historical depiction like that. You’re right.

FT: So basically, people approach you to make sure they get things right, correct?

MK: Hopefully. We like to think that’s the goal. We understand that entertainment is entertainment and it’s never going to be complete reality. People who want to make a movie have to make an interesting movie that people are going to come and see. You put a TV series on, it’s got to be successful to get people to watch it and to keep them coming back to watch it. So, understand there’s always going to be a gap between reality as we see it and working with what sells and what’s interesting. Our hope is to close that gap and come closer to depicting the FBI in a realistic and accurate way while still making it interesting because if people don’t watch something then it doesn’t help anybody. So, you’ve got to strike a balance between making it interesting and popular and yet trying to ensure some accuracy and realism.

FT: I just had a thought—maybe, if you want to be more true to life, and I’m kidding now—they could cut up crime movies into parts like Lord of the Rings or The Hobbit, except the authorities would gather the evidence in the first movie and a year later the DNA results would be back.

MK: (laughs) That’s good.

FT: After people approach you do they ever check back and ask you to look at their finished product?

MK: Sure. Like I said, these projects can represent any level or length of involvement or duration. We may work with a series directly or indirectly for a long period of time. And they may continuously ask us. We’re watching it; we’re interested in these programs as well. Generally, we have to give feedback and follow through.

FT: Is there an FBI person stationed in Hollywood who goes to the sets as an advisor?

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MK: Not so much. There aren’t onboard employees because we just don’t really have the resources, and that would be going a little too far in terms of what our mission is. But retired persons, agents and others, are oftentimes hired as consultants for projects, and they can spend three months being available on the set and that kind of thing, and they do that. It’s not uncommon at all. But, no, we generally don’t have the time or resources for that kind of commitment.

FT: I understand. When you said, “retired” it made a lot more sense. Does the FBI offer resources or seminars or classes or materials to make sure anyone interested portrays the agency in an accurate light?

MK: That’s a great question because a few years ago we were evaluating our ability to be responsive to requests. We were looking at the way we were doing business, the way we had done business over the years, which we concluded was essentially kind of waiting for requests to come in, then we’d evaluate them and try to deal with them, and trying to balance that input as best we could. When we looked at that process we thought, ‘is there a better way, or is there a way to add to this to make it more efficient for us, to be more effective in our relations with Hollywood?’ And what we started doing was offering a twice a year, daylong seminar either in Los Angeles, where most of this is done, but also in New York where a lot of the writers are. We’d invite whatever guild or group of writers or directors or producers in for a day, and give them an FBI 101 course, sort of walk them though today’s FBI and talk about the process, which we have for interacting with us and getting information from the FBI. We’ve been doing this now for a few years, and we’d find it to be very successful, and it really did increase our efficiency. It probably generated some more business, and that’s okay too because maybe people who were going to do projects anyhow didn’t know to come to us, or didn’t know we could offer some guidance. The seminars have become a time and money saving effort because we don’t have to deal with everybody individually.

Another thing I should mention because it’s always on my mind is, generally speaking, we found that storytellers, be they television or movies or book authors are more comfortable with what we describe as yesterday’s FBI. Like we were saying, we all think we know the FBI because we grew up with it, watched movies and watched shows and read books, so, to some degree storytellers today tend to prefer the older version of the FBI because they think that’s what people know, that’s what people are comfortable with, you know, for any number of reasons and that imposes a challenge for us to continue to challenge these folks to look at today’s FBI—the post-911 FBI, the FBI whose mission and priorities have evolved over time. We’re not just chasing bank robbers, we’re not going after organized crime in the way we were. Now, it’s counter-terrorism or cyber or intelligence and that’s a different FBI that a lot of us grew up with and we don’t immediately think of.

So, we’ve made a big effort here to challenge Hollywood, to challenge storytellers to look at working that FBI into their stories for the reasons we’re talking about today. Educate the public.

And the follow-up question is why do we do all this? We have to talk about that we wouldn’t want to leave the impression that we do this simply because it’s fun or it gives us attention or brings attention to our accomplishments, but...
it’s for a much more important reason that dates back to Hoover and everything when we first started interacting with Hollywood: it is a powerful way of educating the public about the FBI. What that results in, hopefully, is not just education of the public, but also their trust and confidence. When they see the FBI depicted in movies and TV shows and they see us being successful in solving crime that’s important because that’s what we do.

FT: Right.

MK: And as a result we hope it increases not just our knowledge and the transparency that this brings, but also the trust and confidence that we depend on. We’re not a huge agency relative to the size of some major police departments, and we really depend on the trust and, as a result, the cooperation of the public to help us prevent and solve crimes. That’s why it’s important to us to make sure that not only are we out there in the public and we’re as accurate and factual as we can be knowing that’s the way people get information. We communicate all kinds of different ways with the public—through the press, through websites, through speeches, through community interaction—but television and movie pieces are a big chunk; we didn’t design that, but that’s the reality and it just can’t be ignored.

FT: Oh yeah! It’s wonderful the FBI has hit on the notion of what great tools movies and television are to educate the public.

MK: It is. Think of it as a tool or just responding to what’s going to happen with or without us anyhow and we can make it better.

FT: After ER came on television suddenly a lot of medical residents wanted to specialize in emergency medicine and the number of ER docs were on the rise. There’s a couple shows that make the FBI look really glitzy, glamorous, and exclusive. Shows like The Blacklist and 24 with Jack Bauer. Has the agency seen a rise in applicants who may have learned about the FBI via these shows?

MK: Yes, well, of course it’s hard to measure, but I think we can confidently say that at particular times after particular projects we get an increase in interest. Probably one of the more measurable ones was Silence of the Lambs when Jodie Foster depicted that young agent in a movie that had that kind of reach and won Academy Awards. That actually had a measurable impact on women, particularly, being interested in the FBI and being agents. It’s just hard to measure on a regular basis. We don’t quiz applicants on what was the biggest impact on them wanting to join the FBI. But, it’s there. I think we had a generation of agents in this organization that’s probably starting to fade now that was heavily impacted by the Zimbilist show. That show was on every Sunday night, families watched it, kids watched it, and there were a lot of men and women who thought, ‘I want to be one of those someday.’

FT: Absolutely.

MK: So, another benefit of popular media is recruiting.

FT: That’s why I asked. You mentioned that everyone knows about the FBI and it’s of obvious benefit for both you and artists if they approach you for more information. You also said there aren’t that many restrictions or liberties if artists get inspired, but you did mention the seal. Tell me about that.

MK: The use of the seal in commercial enterprises is something we try to limit or control. There are some legal implications with using it. But in this modern age it’s become more difficult to enforce it because with the Internet and imagery it’s everywhere. While, technically, they’re supposed to seek permission to use the actual FBI seal I’m sure everybody doesn’t do it. Typically, in TV shows or movies, you’ll see some variation of the seal on the badge, the ID card and that kind of stuff. We ask the production companies to make an actual request to use the actual seal if it’s going to be depicted in programming and we consider it and oftentimes we’ll grant it. We just look to be sure it’s done in a responsible way, and we’ll look at that and make a decision.

FT: In what instances would you not give permission?

MK: Strictly commercial purposes without any direct benefit of the mission to the public.

FT: So, if someone wanted to print up some credentials for themselves, that would be a no-no?

MK: Yes, or anything like that. Whereas if a crime-solving show exists for the purpose of helping us find fugitives and bringing in public tips we’re going to encourage them to be as real as possible and they could probably use the seal, and we take that into consideration.

FT: When you watch FBI shows on TV, Criminal Minds for example—

FT: The Following. Photo courtesy Fox Broadcasting.
MK: White Collar, Without a Trace, Blacklist…

FT: When they flash their credentials, how close are they to the real FBI IDs? Do you look at them and think, “Uh, nooooooo?” or do you think, “Not bad?”

MK: There’s a range. Some are better than others. Again, we discourage the use of the actual identification because we don’t want people copying that and impersonating agents. But some are better than others. Where are you based?

FT: I’m in Delaware.

MK: If you ever get down here we have a wonderful education center. It’s full of great FBI material, and among that is a popular culture section. We have a selection of badges and credentials and things that have been used in movies and TV and you can compare things from major projects.

FT: Just a couple more questions. First, what is the most common request your office gets?

MK: Generally, they have something in mind about a character or a storyline or a scenario and they’ll ask us to look at it and consider it and let them know if it’s accurate or not. You said we all think we know a lot about the FBI, but it’s amazing what people don’t know about the FBI. So, a lot of the questions are about jurisdiction, about what an agent would be doing in a storyline—is it realistic for an agent to do this or that? Most people just don’t know, they probably never had a much contact with an FBI agent or had reason to, and they don’t know. They think they understand, but they don’t really know. It’s mostly jurisdiction, what agents do and how they do it, just the framework of who we are.

FT: I have to admit I don’t know that much about the FBI except for what I’ve read or what I’ve seen on TV. It’s funny—on one show everybody wears a suit and tie—on another show, Criminal Minds, you have Derrick walking around in a T-shirt. I guess it’s like you said, the storytellers have to grab and keep the audience’s attention.

MK: Well, for something like that we don’t have ironclad rules for what you wear in every situation, but generally, agents are encouraged to dress professionally and appropriately and that’s what you’ll find in most instances because that’s sort of the nature of our work, interviewing people and going out. Obviously, if you’re going to be in any situation and specialized, be it protective or undercover or for any reason, then, yeah, you’re authorized to do that. But, generally speaking, we wear suits and ties.

FT: How long have you been in this office?

MK: I’ve been in this office for, on and off, for nearly twenty years.

FT: What’s the most unusual request you’ve seen or heard about?

MK: A number of projects over the years are either exaggerated or science fiction and the like, or maybe trying to mould the real FBI into something like that. Take The X Files, a popular show, a nice show, but not a particularly realistic one. Another area we’ve spent a lot of time on is explaining the differences between us and other government agencies like the CIA. People today still don’t know the difference between the FBI and the CIA, we thought you guys did this or you guys did that, misunderstandings. The FBI has become a much more international organization over the past couple decades and people still are confused over that. Have we become the CIA? No. We’re just an international version of the FBI, and the CIA is still the CIA. Our jurisdictions have never merged. So, maybe a lot of those things where a lot of people have a misunderstanding about jurisdiction and what we do and don’t do, and we just try to help them keep that straight.

FT: Last question: how did you get this specialty, this station? Other agents are staking out crime bosses and kidnappers and
that kind of stuff—how did you draw this duty?

MK: If you look back to how the FBI attract and recruit and hire people from all walks of life, all backgrounds are represented at the FBI. We’re all trained to be agents first, we all go through Quantico and we all go through the same training. And then from there, as your career goes on, there are many opportunities to go into different areas. You can generally apply for them or show interest in them. Sometimes you bring a background into the FBI we hope we can utilize some aspect of, whether you’re a lawyer or an accountant. And communications is an area you might some background in. Often you’ll do a stint or longer in a communications position because you’ve merged that FBI knowledge and that FBI experience with the skill set you had beforehand. So, it was an interest of mine as well as in the interest of the bureau to have somebody with some experience here.

FT: That’s great.

MK: I mean, nobody forced me to do it. I can do other things, which I have, over time.

FT: I just thought of something else. This might be a dumb question: do you and the people in the public affairs office carry weapons?

MK: We have agents and special agents. Of the 35,000 FBI employees worldwide, 14,000 are special agents. When you’re an agent, no matter what position you’re in, whether you’re a street agent or whether you’re a supervisor or manager or executive, you’re an agent and you’re required to maintain the standards and the requirements of the position as long as you’re in that position. And among those is firearms proficiency and you still have to qualify and demonstrate that you are competent with firearms. As a practical matter, you carry it all day around headquarters like you would if you were on the street. You are required to be armed and have access to your weapon and to be proficient with it.

FT: That seems obvious, but I wasn’t sure.

MK: If you have questions email Betsy and send a CD.

FT: Thank you for your time. I understand how busy you guys are.

MK: Well, thank you for your interest and for helping, you know, reaching out to a younger generation that it’s important we have direct contact with them.

FT: Oh, one more question: what would you like to say to teachers about how the FBI is portrayed in the entertainment industry?

MK: The FBI is an important institution in the American government and kids see evidence of it every day in movies, TV shows, books, newspapers and we’re depicted in various ways so we work hard to ensure that’s accurate and represents the real FBI and we appreciate anything teachers can do to help get that across.

Mr. Kortan currently serves as Assistant Director for Public Affairs. In this position, he manages the FBI’s internal and external communications operation and serves as a national spokesman. He oversees the Bureau’s national press relations operation, including the oversight of public affairs officers in field offices; oversees the application of FBI and Department of Justice policies and guidelines related to all communications matters; and interacts daily with national and international news media on issues related to the FBI. In addition, he oversees other public affairs functions, such as the fbi.gov website, speechwriting, community relations, and employee communications.

Want more information? Click below.

What do I need to work for the FBI as a Special Agent?

Special Agent Requirements can be found online. https://www.fbijobs.gov/explore-careers/sa-eligibility.asp and other pages on the Special Agent tab.

What’s involved with working for the FBI?

What sort of other opportunities exist in the FBI?
https://www.fbijobs.gov/explore-careers/professional-staff.asp?emid=

Why is working for the FBI pretty cool, besides the obvious?
https://www.fbijobs.gov/fbi-culture/
How to Set Up

1. Choose your scene

Select an area for the crime scene. It can be within the classroom, a bathroom, at the end of a hallway, or in the gym or auditorium. It can also be as small as a single locker. Decide beforehand if you want one big scene or a bunch of small ones.

Use crime scene tape to mark off the area. This lends a LOT of credibility to the exercise. You can also enlist students to monitor the area- acting as police officers at the scene.

If you have a volunteer to play dead, great. If not either make an outline with masking tape, or tell the kids the body has already been taken away if your crime is murder.

2. Plant the evidence

Include within the scene a variety of evidence. You do not need to make it a solvable crime scene. This activity is just to allow forensics students to observe and record probable evidence at a crime. Remember, police officers do NOT know what is important evidence at a crime until it is analyzed. If you want, the evidence can be marked with numbered/lettered placards.

Possible pieces of physical evidence could include: any of those in the section at the bottom of this page. Be prepared to listen to the students try to solve the crime- they get very excited about possible motives, and/or events.

Got Evidence?
Here’s where to get what you need quick

Hair—cut or pull out some of yours or your pet’s.
Garbage—Never underestimate what others will discard.
Fibers—Rip up some of your old clothes or go to a thrift store where you’ll find all kinds of synthetic and natural fibers CHEAP.

Glass—auto body or glass shops will give you all the broken glass you want.
Prints—Use your own or other faculty members.
Blood—Mix water, corn syrup & coloring or buy on the web, Halloween shop, or Spencer’s Gifts.
Bullets—Ask your school’s cop, hunter friends, or local gun shops for casings.
3. Let them work the scene

Students are told not to touch any items (I move them somewhat between classes to make each scene a little different). They will need graph paper, tape measure, and a directional compass. They may use a camera to photograph the scene.

The first day, if it’s a two-day exercise, students merely record the scene in their notes and complete the diagram (on large, poster size paper). Students absent on the day of the crime can use other “officer’s” measurements. The second day the students can collect the evidence into proper containers. Or, if time does not allow, everything can be done the same day.

4. Let them process evidence

Later in the year students will know how to lift prints, ID fibers and hairs, and classify evidence. Use this to add depth to the evidence you plant.

5. Let them share their findings

Each group should present their findings, a diagram, a description of evidence and collection method orally and with posters or PowerPoint.

Glass--auto body or glass shops will give you all the broken glass you want.

Prints--Use your own or other faculty members.

Blood--Mix wafer, corn syrup & coloring or buy on the web, Halloween shop, or Spencer’s Gifts.

Prints--Use your own or other faculty members.

Crime scene tape--Ask your school’s cop, or order from one of many vendors online. It’s inexpensive.

Bullets--Ask your school’s cop, hunter friends, or local gun shops for casings.
How To Process a Crime Scene

By Jeanette Hencken, Forensic Science Teacher, Webster Grove High School
Edited by Harold Messler, Lab Manager, Saint Louis Metropolitan Police Department Crime Lab

Many teachers at workshops and forensic science conferences want to know how to set up a crime scene. Unfortunately, a sound understanding of crime scene work is necessary before a teacher can even begin to answer this question. On television, crime scene technicians are portrayed as someone who can do it all. However, there are very clearly defined jobs for the crime scene unit in most jurisdictions.

In actual crime scene work, it is essential that the people working the crime scene understand the importance of properly processing the scene. Loss or damage to evidence, not knowing who has had access to the evidence, and failure to determine the location of evidence at any time can result in the evidence not being allowed in court. All of the best testing available cannot overcome the doubt that can occur if the evidence is not properly collected and safeguarded. With this thought in mind, the key elements in crime scene processing are:

- appropriate collection and preservation of the evidence, and
- a clear record of everything that has happened to the evidence from the moment it is found until it arrives in court. (This is referred to as “Chain of Custody”)

This article contains a basic overview of these elements.

Evidence should be collected in a manner that prevents loss or damage to the evidence. Gloves should be worn when collecting evidence and they should be changed between pieces of evidence in order to prevent transfer of any material to the evidence. Glass and metal evidence should be collected in rigid containers to prevent changes to the evidence from breaking or wear. Hair, fibers and small evidence that can be easily lost should be placed in a small manila envelope or sealed in plastic if no body fluids are present. Evidence that contains body fluids should be air-dried, then collected in porous containers (such as paper bags) to prevent damage to the evidence from the formation of mold. Any material that may contain an accelerant should be collected in an air-tight container to prevent loss of the accelerant due to evaporation. Evidence should not be collected in a container that does not seal tightly or is much too large.

Arson evidence should be collected in glass or metal containers that seal tightly and are sized appropriately to the evidence. Oversize containers can be detrimental to recovery of traces of accelerant.

Each container must then be labeled with a minimum of the name of the collector, date of collection, time of collection and description of the evidence. Most agencies require much more information. For example, name of victim, complaint number, officer’s ID number, and other information may be required. A seal should then be placed across the opening of the container with the initials of the collector and the date placed on the seal.

The label and seal are just a small part of the record that must be kept of the evidence. A record of chain of custody must be kept for each piece of evidence that lists the name of each person to have possession of it and the dates involved. The purpose of all of these details is to have a record of all that has happened to the evidence from the moment it is discovered until it arrives in court. Due to careful record keeping and note taking there should be no doubt associated with the evidence.

There are many ways that you can provide your students with opportunities to process crime scene information even with space limitations and the need to reduce set up time due to multiple classes being taught. Some examples are dioramas (scenes set up in small boxes using miniature pieces), handing out previously collected evidence for students to check for correctness, and setting-up multiple, simple scenes (have only 4-5 pieces of carefully chosen evidence.) Whatever method you choose, if you set up your crime scene activity with the needs of an actual crime scene technician in mind, your students will begin to have a good picture of what actual crime scene work is like.

Reproducible lab sheets and a teacher’s protocol for an evidence-collecting activity start on page 22.
Evidence Collection, Just the Basics

By Jeanette Hencken, Forensic Science Teacher, Webster Grove High School
Edited by Harold Messler, Lab Manager, Saint Louis Metropolitan Police Department Crime Lab

Having attended a number of workshops and conferences on forensic science, I have noticed that one question seems to keep popping up. How does one set up a crime scene activity? It is my opinion that a sound understanding of crime scene work is necessary before a teacher can even begin to answer this question. Crime scene technicians are portrayed as someone who can do it all on television programs. However, there are very clearly defined jobs for the crime scene unit in most jurisdictions.

In actual crime scene work, it is essential that the people working the crime scene understand the importance of properly processing the scene. Loss or damage to evidence, not knowing who has had access to the evidence, and failure to determine the location of evidence at any time can result in the evidence not being allowed in court. All of the best testing available cannot overcome the doubt that can occur if the evidence is not properly collected and safeguarded. With this thought in mind, the key elements in crime scene processing are:

- Appropriate collection and preservation of the evidence
- A clear record of everything that has happened to the evidence from the moment it is found until it arrives in court. (This is referred to as “Chain of Custody”)

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Arson evidence should be collected in glass or metal containers that seal tightly and are sized appropriately to the evidence. Oversize containers can be detrimental to recovery of traces of accelerant.

Each container must then be labeled with a minimum of the name of the collector, date of collection, time of collection and description of the evidence. Most agencies require much more information. For example, name of victim, complaint number, officer’s ID number, and other information may be required. A seal should then be placed across the opening of the container with the initials of the collector and the date placed on the seal.

The label and seal are just a small part of the record that must be kept of the evidence. A record of chain of custody must be kept for each piece of evidence that lists the name of each person to have possession of it and the dates involved. The purpose of all of these details is to have a record of all that has happened to the evidence from the moment it is discovered until it arrives in court. Due to careful record keeping and note taking there should be no doubt associated with the evidence.

There are many ways that you can provide your students with opportunities to process crime scene information even with space limitations and the need to reduce set up time due to multiple classes being taught. Some examples are dioramas (scenes set up in small boxes using miniature pieces), handing out previously collected evidence for students to check for correctness, and setting-up multiple, simple scenes (have only 4-5 pieces of carefully chosen evidence.) Whatever method you choose, if you set up your crime scene activity with the needs of an actual crime scene technician in mind, your students will begin to have a good picture of what actual crime scene work is like.
Evidence Lab
Teacher Instructions

Purpose: To have the students determine if the evidence they are given was collected in an appropriate container, as well as, labeled and sealed correctly.

Procedure:

1. For each pair of students, have two different types of evidence in containers.

2. The first piece of evidence should have “blood” on it. This could be a q-tip or some other item with stage blood or red paint on it.

3. The second piece of evidence can be either a piece of fiber, glass or a piece of metal.

4. Each group should have one piece of evidence that is in an appropriate container and one that is not. For the blood evidence, an appropriate container would be anything that is porous – a paper lunch bag or small manila envelope. An inappropriate container that is often chosen by the students is a plastic bag. The fiber evidence should be collected in a container that will prevent loss – a manila envelope (regular mailing envelopes have holes in the corners that make them a poor choice for trace evidence) or a zip-closure container are good choices. Any metal or glass evidence should be collected in a rigid container to prevent the evidence from being scratched or broken.

5. The evidence that is in an appropriate container should be incorrectly labeled or sealed. A label is information that is placed on the outside of the container, but not on the seal. At minimum, a correct label should contain

   - the name of the person who collected the evidence,
   - date and time collected and
   - a description of the evidence.

6. Some law enforcement officers would argue that it is too time consuming to put time on every piece of evidence. But anyone who has done crime scene work for an extensive period of time would tell you that it is important to include. The seal should be placed across the opening of the container and should contain the initials of the collector and the date collected.

7. Explain to the students that they should not open the containers and should assume that what is described on the outside is indeed what is in the container.

8. Each piece of evidence should be numbered with a permanent marker and the number recorded in a key. Your key should contain the number of the evidence, type of evidence, type of container, what is on the label and the seal.

9. When the students are confident they’ve sorted things out ask them to bring you their evidence and data sheet and tell you what they found right and wrong about it and how they know, then either give them a high-five for getting everything right, or send them back to their seats to work some more, but they must figure out on their own what’s wrong. If you want to make it interesting put a time limit on the exercise and remind them at intervals how much time is left.

Student data sheet is on the next page
Evidence Lab

Name__________________ Partners’ Names: ______________________

Record the number of your evidence. _____________

1. Which of the following parts of an appropriate label are missing?

<table>
<thead>
<tr>
<th>Part of the label</th>
<th>Present</th>
<th>Absent</th>
</tr>
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<tbody>
<tr>
<td>Name of collector</td>
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<td>Date collected</td>
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<tr>
<td>Description of the evidence</td>
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</table>

2. Which of the following parts of sealing the evidence properly are missing?

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<thead>
<tr>
<th>Part of sealing</th>
<th>Present</th>
<th>Absent</th>
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<tbody>
<tr>
<td>Seal is in place across the opening of the container</td>
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<tr>
<td>Initials of collector</td>
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<tr>
<td>Date collected</td>
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</tbody>
</table>

3. Is the evidence in an appropriate container?

Why is it appropriate or inappropriate?

Record the number of your evidence.

1. Which of the following parts of an appropriate label are missing?

<table>
<thead>
<tr>
<th>Part of the label</th>
<th>Present</th>
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</tr>
</tbody>
</table>

3. Is the evidence in an appropriate container?

Why is it appropriate or inappropriate?
Forensics in Schools

Educational Resources

Easy to download student activities on a user-friendly website...
...created for upper-middle school and high school students.

Topics include:
- Arson
- Ballistics
- Polygraph
- Blood Spatter
- Impaired Driving
- Police Canines
- Fingerprinting
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Written by a Science Teacher - edited by a Cop!
One of the best things about teaching forensics is watching your students mature intellectually. Benjamin Bloom first published his taxonomy of thinking skills in 1956. As teachers we have an obligation to help students learn to use their minds in more powerful ways. The chart below lists suggestions for you to push your students mentally to higher places. Give them a try; often the difference between an easy forensic assignment and a challenging one is what you ask of your students.

<table>
<thead>
<tr>
<th>Level</th>
<th>Type of Activity or Question</th>
<th>Verbs Used for Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>Knowledge</td>
<td>define, memorize, repeat, record, list, recall, name, relate, collect, label, specify,</td>
</tr>
<tr>
<td>level</td>
<td></td>
<td>clue, enumerate, tell, recount</td>
</tr>
<tr>
<td></td>
<td>Comprehension</td>
<td>restate, summarize, discuss, describe, recognize, explain, express, identify, locate,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>report, recall, review, translate</td>
</tr>
<tr>
<td></td>
<td>Application</td>
<td>exhibit, solve, interview, simulate, apply, employ, use, demonstrate, dramatize,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>practice, illustrate, operate, calculate, show, experiment</td>
</tr>
<tr>
<td>Higher</td>
<td>Analysis</td>
<td>interpret, classify, analyze, arrange, differentiate, group, compare, organize, contrast,</td>
</tr>
<tr>
<td>levels</td>
<td></td>
<td>examine, scrutinize, survey, categorize, dissect, probe, inventory, investigate, question,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>discover, text, inquire, distinguish, detect, diagram, inspect</td>
</tr>
<tr>
<td></td>
<td>Synthesis</td>
<td>compose, setup, plan, prepare, propose, imagine, produce, hypothesize, invent, incorporate,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>develop, generalize, design, originate, formulate, predict, arrange, contrive, assemble,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>contruct, construct, systematize, create</td>
</tr>
<tr>
<td></td>
<td>Evaluation</td>
<td>judge, assess, decide, measure, appraise, estimate, evaluate, infer, rate, deduce,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>compare, score, value, predict, revise, choose, conclude, recommend, select, determine,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>criticize</td>
</tr>
</tbody>
</table>

Chart courtesy of Dr. Alicia T. Wyatt, McMurry University, Abilene, TX
The images on the next two pages, comprise a crime. The idea is to present them to your students and challenge them to solve the crime by looking at the photographs and reading the descriptions.

A more difficult challenge is presented on the three pages following the first mystery. In this issue there are two mysteries.

If you want to make a class set of the pages and have your students work on them in pairs, you’re going to need a printer (and then a copier) capable of printing in color or gray scale. A printer or copier that only turns out black and white products just isn’t going to work. Gray scale is sufficient.

OR, you could transfer the images to a projector that allows every student to see them all at once.

Regarding the note at the bottom right of the second page: there are no clues in this version, and the answers are on page 33.

These pages are from *Scotland Yard Photo Crimes*, used with permission of Dorling Kindersley Publishers.

Please let us know what you think of this feature at admin@theforensicteacher.com. We want to know if you can’t read the text or if the photos are jaggy so we can improve.
INDUSTRIAL ESPIONAGE

Many crimes are committed indoors. In addition to forced entries into private homes and commercial buildings, locked safes are often breached, and not necessarily by force.

1 Stanislaus Pojacksky was a happy man this morning. His design of a silent aeroplane engine had gained the interest of Grievson, Jarrold and Fiske, Ltd., London, a firm of engineers.

2 Ten years of stuffy bed-sitting rooms and grimy toil was over. He'd be Stanislaus Pojacksky, Esq., gentleman of leisure.

3 At 10 o'clock, Pojacksky entered the offices of Grievson, Jarrold and Fiske. He handed his card to Miss Young, Mr. Grievson's private secretary.

4 The inventor was immediately shown into Grievson's room. Grievson listened intently as Pojacksky went over the details of his design.

5 The other two partners, Jarrold and Fiske, were called in to examine the blueprints. The men spent an hour in deep discussion.

6 The three partners then withdrew to the far end of the room. They could hardly contain their excitement — the plan was colossal! "Let's offer him £10,000," whispered Fiske, "and see what he says." The plan was worth far more, but they'd try it.
Choose your suspect; John Hodgson, Robin Steinmetz, or Tim Waverly. Answer on page 41.

“Crikey!” Jarrold exclaimed the next morning. He had come in early to start work on the new design. There were papers all over Grevson’s desk and the ink pot was overturned. Had someone been there?

The plans! Were they safe?

Grevson and Fiske were as upset as Jarrold. This was the worst thing that had ever happened to the firm. Someone in the office must have done it.

Jarrold phoned Scotland Yard. It would take Inspector Black to find the guilty party.

The answer is on page 33.
One of several necessary conditions for the obtaining of a confession is to have incriminating evidence against the suspect, which he understands to be so.

1. The Pimlico Players were reputed for their highly artistic productions, but their efforts were less than profitable. The only one who reaped any benefit at all was Alec Marks, the company's crafty producer and man-about-town.

2. He took pride in putting on a good show — for his friends. His paramours wore the latest Paris gowns, dined in the best restaurants, and drank the finest champagne.

3. In odd moments between rehearsals, the actors grumbled about their dwindling finances and Marks' new suits.

4, 5. One afternoon Marks examined the books. The outlook was dismal. He could just manage his holidays, but there would be little left for the actors' salaries.
That evening’s rehearsal went well, despite the actors’ discontent. They’d played to a small audience last week, and worried about the troupe’s future.

After the rehearsal, Marks broke the news to his leading actors — Godfrey Miller, Wallace Goodhew and Grace Peattie. He told them he was forced to close the show — they’d be out of work indefinitely.

Miller took out his long-suffering landlord’s ultimatum: he had two days in which to pay his back rent. “I’ll fix him!” he muttered.

Miss Peattie ran to her dressing-room, sobbing wildly. How would she be able to look after her invalid mother? “He can’t do this to me!”

Goodhew cursed the producer as he felt the sharp edge of his sword. “I’ll make that cad think twice about not paying!” he said.
11 Once the three had gone and he was alone in the building, Marks went back over the books, hoping to juggle what was left of the funds to his advantage. He never heard the fatal footsteps behind him, but just before he died he caught a glimpse of his assailant.

The Inspector calls

13 Among the items on the desk were bank statements, a small round piece of metal and the murder weapon. Under the victim's hand a "G" was written in blood.

14 The Inspector questioned the only three members of the troupe whose names started with "G". Holding the murder weapon, he noted their immediate reactions.

15 Miller appeared to be angry and insulted: "I may have hated the dirty scoundrel," he said, "but murder is not in my repertoire."

16 Goodhew made a menacing gesture, then checked himself. "You can ring my wife," he sneered, "I was home all night. I didn't kill him."

17 Miss Peattie gazed appealingly at Inspector Black and pouted. "Well, you certainly don't think I hit him, do you, Inspector?"

12 The next morning Mrs. Kelley, the wardrobe mistress, discovered Marks' body. She immediately phoned the police.

? ???????????????????????????????
Inspector Black studied the faces of the three suspects glumly. He doubted that the lab report would be able to reveal the guilty party. Luckily, however, he knew who it was. Do you?

The answer is on page 33.
The Case of the Forged Will

Stanwick and Bodwin both noticed that the writer of the slip of paper, who presumably was the forger, had written the date (the 11th of February, 2001, as stated in the forged will) in the Month/Day/Year format. A Briton, especially someone impersonating another Briton, would have written the date in the Day/Month/Year format, or 11/2/01. This eliminated Barbara Teti, the only British beneficiary, as a suspect.

The other two suspects were Americans, and the Month/Day/Year format is customary among most Americans. In the military, however, the Day/Month/Year format is the standard. The only beneficiary who would automatically use the Month/Day/Year format was therefore the non-military American: John Manning. Bodwin realized that the format implicated the American suspects, but Stanwick deduced that it implicated Manning specifically.

Industrial Espionage

Photo Mystery Answer

It has been said that the director’s secretary knows more than the director. In this case, the secretary knew too much - namely, the combination to the safe. Because Grievson’s room and safe were entered so easily, I knew that the thief had to be someone who was familiar with his office. But whoever stole the plans had been uncertain as to which envelope to open. Grievson, Jarrold and Fiske all knew which was the correct envelope. That left Miss Young. Also, the envelopes had been cut with a pair of scissors having small curved blades, which left curved cuts along the edges of the paper (pic. 10). It only took a moment to find the nail scissors in Miss Young’s bag (which you saw her using the previous day, pic. 3) and then a few minutes more to elicit a full confession from Miss Young.

Final Curtain

Photo Mystery Answer

Miss Peattie may have been a great actress, but she wouldn’t have won an award for forethought. When I held up the gun in a handkerchief, I hadn’t told the actors that Marks had been clubbed and not shot. The natural reaction to a gun as a murder weapon is that the victim has been shot. Therefore, Miss Peattie’s remark gave her away immediately. The metal piece from Miller’s costume probably fell off earlier in the evening, and was placed on the desk for safekeeping.
It’s no secret there isn’t enough money out there for education. And not just for education as in, Education: the system, our promise to our children, the basic right every child has to grasp the tools that will make a difference in their lives.

Nah. I’m talking about education money where we care about it the most: our classrooms.

Every teacher can rattle off a list of supplies they need or would love to have, but can’t because there’s no money in the budget. Every teacher has to make due with what they have unless they are willing to dip into their own pocket. And too many of us do that. But this is the age of the Internet and times are a’ changing.

Today people are able to use the power of the online masses to raise money. Those looking to start a business or launch a product might use Kickstarter.com. Those who suffer catastrophes might turn to Gofundme.com. And there’s other examples for those and other categories. My point is that your subject is cool, so cool most of your students’ parents wish they were taking your course. And tell me peoples’ eyes don’t light up when you’re at a cookout and someone asks what you teach. People are fascinated by forensics and are willing to help with your lessons if they can. And that’s where crowdsourcing comes in.

Crowdsourcing is putting it out there on the Internet that you need money to do something special/awesome/emotional/humanitarian and you’d appreciate any donation. Many folks won’t blink before going to another site. But some folks will think about your goal and kick in something. And even if it’s only pennies, those pennies add up.

Obviously, if you’re still reading you’re entertaining the idea of crowdsourcing. But you don’t want word getting back to the administrators of your school or district that you’re telling the world no one cares about you or your students and you’re reduced to begging. If you’re going to do this right you need to do your research and present it to your department head and principal and let them worry about kicking it up the chain of command. There’s a way to put a very positive spin on crowdsourcing and you’re going to need that spin.

Remember I said you’re going to have to do some research? Below are some links to get you started. If you have a colleague or friend who can help you brainstorm, use them. This isn’t money for nothing that will magically appear overnight, but it might be money for that costly unit four months or more away. And for your supplies for next year.

Also, don’t be fooled—there’s going to be work involved. You’re not going to be able to fill out a form in five minutes and start counting your money. Besides taking the time to understand what you’re getting into you’ve got to put your best foot forward to make donors want to help you. I’m sure you have a lot of good ideas about why people should give you money, but don’t forget about the value of another perspective. Administrators, colleagues, and even your students will be happy to weigh in about how to make your pitch more appealing to your potential donors.

And finally, be aware you’ll have to provide follow up to your donors. They want to know how the money was spent, if their donation made a difference, and to feel good about what they did. Think about a Facebook page for your class or a blog where you students can describe the impact of the funding.

If you decide to go this route please drop us a line and let us know how it went at admin@theforensicteacher.com.

http://www.fastcompany.com/3025597/donorschoose-hot-for-teachers
http://toronto.ctvnews.ca/classroom-crowdsourcing-teachers-log-on-to-raise-funds-for-school-supplies-1.1591300
https://www.facebook.com/pages/Crowdsourcing-in-Education/232421960147676
http://www.adoptaclassroom.org/
http://teacherpop.org/2015/07/crowdfunding-for-the-classroom-donorschoose-and-pledgecents/
Do your students kick butt?

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Do you have a lab your students love?

Want to get paid for sharing it?

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I was hired in 2010 by the West Virginia University Forensic Science Initiative as a curriculum developer to design, amongst other things, a forensic firearm and toolmark curriculum. The curriculum was expected to reach a diverse audience including college students and crime laboratory trainees. A project of this nature had not been previously undertaken in the academic community making this uncharted territory.

In an effort to build a solid foundation for this curriculum, I contacted numerous local, state, and federal crime laboratories across the country for guidance, and one reached back: the Allegheny County Medical Examiner’s Office in Pittsburgh. After several phone conversations with Dr. Robert Levine, head of the firearm and toolmark section, I made a trip there to further discuss the particular aspects of the curriculum and how to approach its development.

During my visit, Raymond Everette, one of the firearm and toolmark examiners, took an interest in what I was doing and began sharing some of the materials that he received as a trainee. He also told me about an exercise that he had to complete that involved toolmarks on 35mm film. As he described it and how it was made, the proverbial light began going off in my head. Upon my return to WVU and a trip to Lowes and Walmart, I assembled the items necessary to make a prototype of this exercise. After creating it, I beta tested it on a group of undergraduate students with encouraging results. As I created and implemented these exercises it occurred to me that this would be appropriate for a high school forensic science class.

Teaching Toolmark Identification in the High School Classroom

Toolmark identification is a fascinating forensic science discipline and one that is equally as fascinating to teach to high school students. The hands-on nature of toolmark identification is particularly appealing to both teachers and students alike. Teachers like it because the materials to make laboratory exercises are readily available, students are enthused about performing the exercises, and the crime scene scenarios are only as limited as the teacher’s imagination. Students like it because they get the opportunity to handle, manipulate, and evaluate objects that are part of their everyday lives. The fact that these objects mirror items of physical evidence that are submitted to crime laboratories in criminal cases engages students in a very meaningful way.

The limitation of these exercises, in a classroom setting, is that they almost always involve class characteristics. While class characteristic examinations are certainly a worthwhile endeavor, the true value of toolmark evidence is the ability of a questioned mark from a crime scene or an item of evidence to be identified to a particular tool. In order to accomplish this task a specialized instrument called a comparison microscope...
is required (Figure 1). In a crime laboratory this is a standard piece of equipment. In the classroom this is anything but standard. A basic comparison microscope costs anywhere from $40,000-$50,000 and this is without upgraded features that would be desirable for teaching purposes. Older used models can be found from time to time on the internet, but these are still cost prohibitive for the typical high school teacher. Even if the purchase of a comparison microscope was financially feasible, its value in a typical classroom of 25 to 35 students would be limited.

The absence of a comparison microscope does not however preclude the possibility of providing students with the opportunity to compare toolmark evidence. There is a simple, cost effective method of developing comparison exercises. Stereoscopic microscopes and inexpensive items found at a local hardware store and Walmart are all that is needed. The following describes the materials and methods required to prepare these exercises. The following materials are needed to

**Materials**

**Lint Free Soft Cloth** (not pictured). Inevitably as students handle the film sections they will deposit sweat, oil, and other residue from their fingers onto the film which should be wiped off after each use. A soft cloth will remove these deposits without damaging the striated marks on the film.

**Plastic Bags.** Used to contain each exercise.

**Paper Cutter.** Used to cut the film into sections.

**Razor Knife.** This can be used in conjunction with a straight edge ruler in lieu of a paper cutter.

**Ruler.** Used to measure out equal lengths of film. This can also be used in conjunction with a razor blade to cut film.

**Film.** This is the substrate that will accept the toolmarks from the sandpaper.

**Sandpaper.** This is the tool that will be used to create tool marks on the film.

**Hand Held Sanding Block.** This item is not an absolute requirement, but it’s easier to manipulate the sandpaper with it than without it.

**Stereoscopic Microscope.** This is the preferred magnification tool to be used when performing these comparison exercises. Using a stereoscopic microscope allows the student to keep their hands free which makes manipulating the film a much less cumbersome task.

**Fingerprint Magnifier.** This can be used instead of a stereoscopic microscope. A fingerprint magnifier is a hands free, low power, magnifying device used to examine and compare latent and inked fingerprints. They can be purchased from any forensic science equipment vendor (i.e. Evident, Lynn Peavey, Sirchie, etc.) There is no alternative to the fingerprint magnifier other than the stereoscope which is already mentioned in the article. They range in price from $10 from [https://www.shopevident.com/category/magnifiers/5x-folding-magnifier](https://www.shopevident.com/category/magnifiers/5x-folding-magnifier) to upwards of $200 from other sources. Alternatively, handheld magnifying glasses are available new from a variety of vendors for $9 - $14. But check around in your department; chances are good another faculty member has some of either sitting in storage.

**Small Handheld Flashlight.** Used with the fingerprint magnifier to highlight the striated marks on the film.
Method

Step 1. Give each film canister a letter or number designation. This will help to keep track of the film when it comes time to make the exercises (Figure 3).

Step 2. Pull the entire length of film from the roll until it separates from the plastic reel. The reel can then be discarded (Figure 4).

Step 3. Place the sandpaper in the holder and place it on top of the film (Figure 5).
Step 4. Put substantial pressure on the block with one hand, grasp the tag end of the film, and firmly pull it across the block until the opposite end of the film is reached. Roll the film up and return it to the canister (Figure 6).

Step 5. Open a new roll of film and repeat steps 2, 3, and 4. It is important that each time a new roll of film is used the orientation of the sandpaper block is changed each time. This will insure that the toolmarks are not repeated (Figure 7).

Step 6. Using a paper cutter (Figure 8) or a ruler and a razor knife (Figure 9), the film can be cut into sections. It is recommended that the film be cut into 2 inch to 3 inch sections. These sizes are easy for student to manipulate under a stereoscopic microscope or fingerprint magnifier. When making the cuts be sure that the edge is straight, neat, and clean. This pushes students to make identifications and eliminations based on the striated toolmarks rather than physically matching the ends of the film together. It’s advisable that this be practiced on spare film before making the actual exercises.
Step 7. Once the desired number of pieces of film have been cut for a particular exercise, they should be labeled (Figure 10) and placed in a bag (Figure 11).

The Comparison Process

**Stereoscopic Microscope.** The film is laid down edge to edge on the stage and observed through the eyepieces (Figure 12). This is the easier of the two methods.

**Fingerprint Magnifier.** The film is laid down edge to edge and the base of the fingerprint magnifier is placed on top. The flashlight is held at an oblique angle to highlight the striated toolmarks (Figure 13).
This image (Figure 14) is an example of an identification from the film exercises. The red arrow points to the white space separating the two pieces of film. This would be the equivalent to the hairline that is seen when looking through the eye pieces of a comparison microscope. The image in Figure 15 is an example of an actual toolmark identification. The red arrow points to a black line which is the hairline seen through a comparison microscope. This hair line is used to differentiate the image from the left stage and the image from the right stage.

**Tips for Preparing Exercises.**

There are several points that should be taken into consideration when making these exercises:

- When making film sections that are going to be identified to each other it is recommended that they be made consecutively. This assures that there is complete agreement of the striated toolmarks on the film.
- The first set of exercises should all have identifications. It is important to build students confidence and ability to make identifications. Later exercises should have known impressions all of which can be eliminated.
- The level of difficulty can be adjusted by using different grits of sandpaper. The higher the grit number the finer the striated marks that will be made.
- Pulling the film across sandpaper twice will create more striated toolmarks which will make the comparisons more difficult.
- If you find film, buy as much as you can! In the age of digital photography this is a rapidly disappearing commodity.

**Difficulties Encountered in Making Exercises**

A number of obstacles were encountered in the production of these exercises. First, the film has a significant amount of memory. When it is first pulled off the roll it has a tendency to want to coil up on itself. This makes manipulating it difficult and at times frustrating. A colleague of mine suggested pulling the film all the way to the end of the roll, hanging a weight from the end of the film, and allowing it to hang overnight. While I have not tried this, it merits consideration. Another colleague had a suggestion: “After you pull the film out of the canister it wants to roll up again. Try rolling it up the other way, against the curl, securing it with a rubber band around the spooled up film, and letting it rest for 24 hours. This works beautifully with posters that come out of a tube.” I have not tried this either, but will the next time I making film sections. Second, making
these exercises requires a significant time commitment. Scoring the film, measuring it, cutting it, and labeling it is very time consuming and tedious. If memory serves me correctly, it took me an entire 8 hour work day to make a set of 20 exercises. Third, cutting the film perfectly straight takes a bit of practice.

Implementation
This exercise can be used any time toolmark identification is taught. I suggest saving this exercise for the last part of a toolmark curriculum. When a toolmark examination is conducted in a crime laboratory it always begins with the evaluation of class characteristics and concludes with a comparison of individual characteristics. Since this is the sequence of steps in an evidence examination, the curriculum should reflect the same logical progression.

Student Reactions
In the time since I first created these exercises I have used them with students from all walks of life including high school students, college students, and forensic practitioners. Regardless of the audience, these exercises have been very well received. Any student that enjoys the puzzle solving aspect of impression evidence will enjoy performing these exercises.

Closing Remarks
These exercises are worth the time, effort, and expense to prepare them. It’s a one time commitment and once they have been made they can be used year in and year out. They do an admirable job of providing students with the opportunity to compare individual characteristics of toolmark evidence when a comparison microscope isn’t available.

About the Author. Chris Bily is an Instructional Coordinator with the Next Generation Forensic Science Initiative at West Virginia University. He can be reached by email at Chris.Bily@mail.wvu.edu or by phone at (304) 293-9496.
In a survey on our homepage we asked visitors to describe a shortcut they’ve discovered that makes their life easier when they teach forensics. The survey promised a cool prize to the best shortcut. The responses are below.

Get to know your local ballistics expert (from law enforcement). Be VERY specific about what level your students are and what you want them to learn. Then have the ballistics expert come in and talk to your classes, either as a guest speaker during class or as a in-school field trip.

_Melissa McCarthy_

I like bringing in experts from the field to teach from their experience. I am not experienced at all in forensics. Having experts come in brings the lessons to real life.

_Angelique Fernandez-Leary_

As I teach a much lower functioning group of students, short cuts are essential. I have found that giving students open notebook tests for each unit make it much easier for the students and myself.

_Jennifer Pinkerous_

I am all about making “kits” for future use. For example, when I make my anti-serum kits for blood typing, I’ll make sure that I properly label all bottles/vials, I’ll include any needed supplies like well-plates, toothpicks, etc. I also take the time to create a “reminder” handout that reminds students how to perform the experiment and analyze the results. Then, when students need to do blood typing in a mock crime scene, they know to go right to that “kit.”

_Rose Ventimiglia_

I keep all the labs in large plastic storage containers labeled with the name of the lab. I keep the materials in the box along
with copies of the lab. After we investigate the lab and before I put it away for next year, I re-stock as much of the materials as possible.

YVETTE

Since this is the first year for forensic science on our HS campus and I’ve been creating our school’s curriculum as we go, my shortcut has been to find great activities online that other FS teachers have posted or that I find in your magazine! High School FS teachers really need a “gathering place” for great lesson ideas and lab activities. I sometimes have great difficulty finding quality lessons/activities online.

Joi Parmley

Shortcuts are using technology for the labs. Having all the materials available for the students on-line is incredibly helpful.

Roxanne Kuerschner

Created blood stain analysis cards for lab.

Irene Gruber

Keeping notes on what works and what doesn’t and then transferring those notes directly into the lesson plan.

Nancy Bates

I continually research the internet for ideas and attend many forensic workshops for new ideas even though I have a Master’s degree in Forensic Science.

Nancy Kochis

I save all my labeled evidence containers so I can just refill as needed each year.

Brenda Holm

I prefer to read all information to my kids at the same time.

Shellie Arentson

“Scenarios” allows students to practice content in smaller chunks and it makes a larger activity (such as a dissection) flow more smoothly. Because each previous scenario incorporates various aspects of death investigation, when students complete a large death investigation - they are more able and competent in their assessments.

Robin Jones-Walker

The Genetics Science Learning Center at http://learn.genetics.utah.edu provides teachers and students an excellent resource for virtual labs

Gary Cavender

I have my colleagues watch for neat ideas and submit them to me since I am new to teaching forensics.

Jean Becherer

I live in a rural district and I offer extra credit to any kid who brings in their own dead animal for the project. That way I don’t have to source them.

Tracy Rendleman

I always try to restock by labs immediately after we finish them. It is so nice to pull out my lab totes and be ready to go for the next semester. I also take plastic containers and ziploc bags everywhere I go just in case I find things that I can use in class.

Sheri McClarren

It’s not a shortcut but creating an actual body farm with donated newborn pigs. I only have to look up the temperature data but my students have been able to identify the instar stage and the exact date I put out the pig.

April McPherson

Students create their own crime scene kits. They are given a list of all of the materials and must create their own crime scene investigation duffle bags that they will keep and use for all of their lab investigations.

Kerry Hinton

Quizstar. It’s a website for online quizzes. It’s a quick way to gauge learning for the week. Quizstar grades the quizzes and I can look at the responses to determine what to re-teach.

Shelly Duk

CSI Experience from Rice.edu

Barbara Nicholas

Dust and photograph before lifting. Print the photos as transparencies for easy lining up for matches

Jim Demchak

Have notes available for students to download so that they will only have to write a few things on them. So many of my students say they learn from listening to me.

Nancy Kochis

Winchester has a ballistics calculator on their website. I designed an introductory ballistics activity around it. It was easy and Winchester did most of the work for me.

Erik Selinger

Teach a bit, ask a bit - teach your students an aspect of a unit, and ask them to discover the rest, from their lives, from TV/web, or just via deduction

John Giacobbe
The ability to discuss, assign and assess with online programs has been very beneficial to the teaching process.

*John*

To try to be organized.

*Debbie Brown*

Taking a few items and making it a complete lesson. i.e., made a zombie, used the TI Zombie Autopsies Unit and threw in a few lessons about Emergency prep and voila - a whole unit about spread of diseases, lab and crime scene safety, and emergency prep.

*Deneen L Hernandez*

I have chromebooks for student use in class. I often have students research websites to create appropriate activities for our unit. This gets the students involved and excited that THEY are coming up with what they are going to do rather than having the activity chosen for them.

*Carrie Harmon*

I use Interactive Science Notebooks in my Forensics class. The students create their own understanding through drawings with labels and lots of color. It really deepens their understanding and helps them take the time to process new information.

*Dawn*

The website http://www.all-about-forensic-science.com/ is my favorite go-to. I also use the Science Spot for some resources.

*Heather Cress*

Making sure that I keep my ideas for all of my units in one location and organized by topic so that I can quickly access everything and I am not having to look for new things when I begin teaching the unit.

*Staci Wagner*

This year I will be creating unit packets for each topic/concept like law & order, fingerprints, hair & fiber, blood, human remains, etc… This way students have easy access to information as it pertains to the crime scene analysis at the end of the class (semester exam).

*Anonymous*

I have students work in groups so that a wide variety of abilities can participate even in more difficult units like DNA Profiling. I use ‘Brag Sheets’ where students communicate their participation in the project as well as “Peer/Self Reviews” where students assess their own input as well as their teammates efforts. The group grade is 50% and the individual grade is 50%. I have less to grade and the students have the opportunity to be part of a higher level project than they would have been able to do on their own.

*Mary Walmsley*

We now do checklists for the beginning of each lab to keep students on task and make big labs into stations to save money on equipment. That way each student gets the experience with the materials but not at such a high cost.

*Shawnna Holt*

When I give case studies or articles to read and analyze, I get MUCH better results when I print definitions in the margins of words that my students will not know. These could be forensics terms, references to things they wouldn’t normally know about, and also higher-level vocabulary words. Basically, this helps provide access to the text for all readers.

*Rose Ventimiglia*

A shortcut is to stop talking, let the students guide the learning, based on their needs and interests. I’ve taught forensics over 10 years and every year I learn something new from them!

*Keri Meador*

For the entomology unit I have the students make a crossword puzzle with the terms that we learned in the unit as a review for the exam. They usually do the best on the exam for this unit and I think it has a lot to do with creating the crossword puzzle.

*Andrea Smith*

Driving home the point that the students should not use too much fingerprint powder.

*Colin Reid*

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*Anonymous*
Below are only some of the great training offered by the American Academy of Forensic Science’s website (www.aafs.org) and other places on the web. Please note: all email and website links are active.

August

28
Criminal Investigations/Court Room. To be held at: Sam Houston State University. For more information go to http://www.cjcenter.org/stafs/forms/STAFS_cic.php. This workshop is specifically for high school teachers.

September

14-16
Medicolegal Death Investigation Training Course to be held at Cuyahoga County Medical Examiner’s Office, Cleveland, OH. For more information go to http://medicalexaminer.cuyahogacounty.us/en-US/Law-Enforcement-Program.aspx.

14-18
Evidence Collection Accelerated Training to be held at Sirchie in Youngsville, NC. In this fast paced, five day workshop students will be introduced to, and gain practice in, crime scene investigation, fingerprint theory, fingerprint powders, latent print locating, processing, and comparison techniques, physiological fluids, controlled substances, theft detection, GSR, serial number restoration, and tire, footprint, and toolmark casting. Contact Sirchie at 1-800-356-7311 for more information.

28-Oct 1
Bloodstain Pattern Documentation Class to be held at Sirchie in Youngsville, NC. This 4-day, hands-on course is intended for crime scene investigators/technicians—introducing the student to the nature and value of bloodstain pattern evidence; teaching the student to recognize basic pattern types and demonstrating through practical exercise the Roadmapping method of documenting bloodstain pattern evidence. At the conclusion of the course, the student will be able to recognize basic bloodstain pattern types and be familiar through practice with a proven method of documenting bloodstains for future analysis. Contact Sirchie at 1-800-356-7311 for more information.

October

26-30
St. Louis University’s 112th Medicolegal Death Investigator Training Course. Saint Louis University SOM, Div. of Forensic Pathology. Offered three times each year, this five (5) day program teaches individuals how to conduct scientific, systematic and thorough death scene and telephone investigations for Medical Examiner and Coroner offices. This course meets all educational requirements to prepare to take the ABMDI registry examination. This training
What's Going On?

One of the biggest dangers of doing the same thing year after year is you get into a rut—the setting or style of a particular unit becomes comfortable, but it's too easy to be blind when it gets stale. So, get a new pair of eyes.

Find free time during one of your staff days before the students start and ask another teacher with absolutely nothing to do with science to lend you a hand. Maybe an English or art or physed teacher.

Give this person a copy of your curriculum and ask them for ideas about where to stage various activities (decomposition, tool marks or tire tracks, or fingerprints or blood spatter for example). But give this person the sheet 24 hours in advance and ask them to take you to where in the school they think it would be cool to host the scenes. Assuming staff cooperation, would the library be good for fingerprints? What about the nurse’s office for blood spatter? Muddy footprints in the gym? Decomp out front by where the buses park?

I'm not saying you should make more work for yourself, but another perspective about where and how to set things up is never a bad thing.

You might even find yourself getting really psyched.

Just for Fun

Get new eyes

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Do you or your organization have a workshop, seminar, conference, training opportunity, or announcement you’d like to share and have included free? Please email us at admin@theforensicteacher.com and tell us about it!

www.theforensicteacher.com
Katlyn Milligan, 20, of Morgantown, NC took a relative to the ER because of a back problem. Since ER cases are triaged on the level of severity of injury and immediacy of need for treatment (sharp chest pains vs. a bruised thumb, for example) their visit wasn’t of the highest priority to the emergency department. After two hours, however, Katlyn had had enough. She went into the restroom and held a lighter to the ceiling sprinkler until it went off, spraying water everywhere and setting off the fire alarm. Emergency personnel rushed in and tossed her into the system where she was quickly evaluated. Then she was arrested. Katlyn later told authorities she’d been previously charged in Florida for making a bomb threat. There was no word on how long her aunt had to wait for her bad back.

Jamie L. Gordon, 30, of Decatur, IL was struck on the head from behind by an assailant with a bowling ball as she entered the office of the Pla-Mor Lanes, a bowling alley. She was knocked unconscious and about $2,100 was stolen from the office safe. Police immediately responded to the 911 call made by her manager and the street outside the establishment was soon awash with police car lights. Patrol officer James Weddle asked the manager if he could view the video from the camera in the office. When the video was played they saw Jamie enter the office and pick up a bowling ball in one hand and a tray of money in the other. Then she hit herself in the back left side of her head with the bowling ball and fell to the floor for 15 minutes and waited for another employee to discover her. When confronted with the video Jamie admitted to staging the robbery and led police to her car where $439 was recovered. When asked about the rest Jamie admitted to blowing it in the bowling alley’s slot machines. Needless to say, Jamie didn’t make bail.

Melanie Nash of Lancaster, NH conspired with three other people to dig up her recently deceased father’s grave so she could search the casket for “the real will.” Nash, who was caught with her hand in the cemetery cookie jar, so to speak, felt she’d been shorted in her share of the inheritance. In the casket she didn’t find another copy of the will, only vodka and cigarettes. Nash told police she dug up the grave “with respect” and her father “would be OK with it.” She was sentenced to prison along with two of her coconspirators.

Daniel Sion Palmer, 26, of Miami, FL was in New York City and pulled a gun on a man at 3 AM and demanded the man’s large, gold chain. He took the jewelry and ran, but returned after he’d had a chance to examine the jewelry. He confronted the victim and indignantly informed him the chain wasn’t real gold. This gave the victim a chance to flag down a passing police car. Palmer jumped into his Mercedes and sped away, ignoring the police who turned on their lights, until he was captured a short distance away. He was charged with numerous felonies.

Jorge Ramirez-Sierra of Riverdale, NJ was arrested a few months ago at a security checkpoint when an officer saw him stuffing syringes into his pants. He was detained while officers found a number of small bags of heroin in his car. He was charged with the obvious crimes plus being high on heroin and possessing drug paraphernalia plus having an outstanding warrant. Somehow, he made bail and was ordered to appear in court recently. On the morning of his hearing a close friend of his woke up to discover his car missing. While on the phone to the police another call came through, this one from Ramirez-Sierra who informed his friend he’d borrowed his car for his court date. The police were at the friend’s house when Ramirez-Sierra returned, this time with much more drug paraphernalia than the car contained when he’d stolen it. Plus, he’d acquired an open bottle of whiskey. Both men were charged with numerous offenses.
Stoopid Movies

More stoopid criminals; these guys are priceless.

Click on the cameras below to see the movies (internet connection required).

The individual in this video was observed shoplifting items from a nearby store shortly before the incident in the video took place. Store employees didn’t know who the suspect was when he got away. Then this video went viral and the employees called police and he was arrested. See if you can figure out why this individual was memorable to the store employees.

This is the rest of the story. Forgive us for hitting this topic twice, but this guy is pure Stoopid Criminals gold.