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The role of mental health, brain science, and psychological awareness in our lives and in society increasingly appears in the news media, from calls for everyday mindfulness to potential warnings of degenerative effects of concussive sports. In law, the state of someone's psychological health, with assessments of mental competency, child development, intent, impairment, and, increasingly, neuroscience, often takes center stage in courtrooms. There is also a legal tradition of evaluating psychological wellness, the use of psychological profiling, and trying to understand intent, memory, and biases in an effort to determine “truth.” In this issue of Insights, we try to explore the relationship between psychology and law, how it has evolved over time, and how breakthroughs in brain science may reshape what we understand about fundamental legal concepts.

The articles in this issue grapple with some of these concepts. Adam Benforado, of Drexel University and author of Unfair: The New Science of Criminal Justice, suggests that just as neuroscience can expose flaws in the justice system, it also offers a “map” for reforms. Next, Joyce Lacy, of SUNY Buffal, explores the (un)reliability of something relied heavily upon as evidence in court: eyewitness testimony.

The Teaching Legal Docs feature in this issue discusses a forensic psychology report, a common court document used to assess someone’s mental capacity. There are three Learning Gateways activities, developed by JoEllen Ambrose, to help students explore some of the concepts discussed in this issue. A resource page at the end of the issue, Explore More, points to additional teaching supports, articles, and materials for your use.

As Insights continues to grow into its new digital format, please feel free to send a note about what works, what you’d like to see more of or new, or how you use any of the resources in the issue. We value your input and look forward to your comments.

Enjoy the issue,

Tiffany Middleton
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Stay Connected!
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There was a note slipped under our door. I don’t remember which one of the four of us picked it up: Andy, Nelson, Johannes, or me. We’ve now scattered: Andy, a lawyer in San Francisco; Johannes, a banker in New York; Nelson, a violinist who seems to be in a different city each week. But, back then, we were all stuck together in a cramped bunkbed suite that Yale must have modeled on submarine quarters—four of the hundred sophomore members of Davenport College.

It was the weekend, a Saturday morning, in December 1998. It had been warm enough the day before to trick us into thinking that spring had come early. But it hadn’t. The winter would be harsh.

The flowers began to pile up at the gate that morning. People were holding
LaJeune Oxley was in the kitchen listening to Bach and when the officer told her that there was a “lady down” just across the street, she had a moment of panic. “My heart went crazy,” she remembers. She thought it might be her daughter, Daphne, who had just taken their cairn terrier out for a walk. She rushed past the cop, out into the street, to the grassy patch where the body lay. There were red eyes in the dining hall. It looked just like tragedies do on television. But these were my friends. And the dialogue had none of the purposefulness of a scripted show. Our words were repetitive, unproductive, not moving toward anything, as if each new conversation had to match the last, no more, no less. No one knew how, but how? No one knew why, but why?

Suzanne Jovin, 21, bright and beautiful, a senior, one of our own, had been stabbed to death.

Reading the details again, almost 20 years later, I am struck by how familiar her last day of life seems. Every day, I walked over the same bricks, flagstones, sidewalks. How many times did I pass through Phelps Gate or stroll by the Trinity Lutheran Church on Orange Street? Suzanne had volunteered there in the early part of the evening. It was the end-of-the-semester pizza party for Best Buddies, an organization that pairs college students with intellectually and developmentally disabled people. By a little after nine, she was exhausted. She ran into a classmate on her way to drop off some keys borrowed for the event and told him she was looking forward to a long sleep.

She never made it to her bed.

It was less than an hour later when the police knocked on the door of the Spanish colonial revival house on the corner of Edgehill and East Rock. She dropped off a draft of her senior essay that Friday afternoon. Every day, I stopped at the store, Krauszer’s, where she likely bought the Fresca they recovered at the crime scene—it was the only place that had them. I remember well the white pillars of Brewster Hall, where she dropped off a draft of her senior essay that Friday afternoon. Every day, I walked over the same bricks, flagstones, sidewalks. How many times did I pass through Phelps Gate or stroll by the Trinity Lutheran Church on Orange Street? Suzanne had volunteered there in the early part of the evening. It was the end-of-the-semester pizza party for Best Buddies, an organization that pairs college students with intellectually and developmentally disabled people. By a little after nine, she was exhausted. She ran into a classmate on her way to drop off some keys borrowed for the event and told him she was looking forward to a long sleep.

She never made it to her bed.

It was less than an hour later when the police knocked on the door of the Spanish colonial revival house on the corner of Edgehill and East Rock.

Left: Suzanne Jovin, the Yale University student killed in December 1998; above: an interrogation room. Images courtesy of the New Haven Register and Wikimedia Commons.

Adam Benforado is a professor at the Thomas R. Kline School of Law at Drexel University. He is the author of Unfair: The New Science of Criminal Injustice.
Every fact supporting a theory of guilt was catalogued and when things didn’t quite line up, the police seemed to look to make them fit.

face down, but when she saw the feet, she held up.

“I looked at her shoes, low boots, hiking-type shoes, and I knew it wasn’t Daphne.”

It was a stranger—jeans, boots, a maroon fleece: Suzanne.

“I didn’t even look for blood. It did not enter my mind that someone was dead on our street.” This was, after all, one of the wealthiest and safest neighborhoods in the city—a neighborhood of doctors, lawyers, and professors. There was blood, though, right there, beneath the tree, in the warm night air, two miles from Davenport College.

Suzanne, the double-major, fluent in four languages, sophisticated, enthusiastic, caring, and loyal, had been stabbed 17 times in her head, neck, and back—the tip of a knife blade broken off in her skull.

It was the first time I had ever known someone personally who was murdered and it was an awful, rending thing, engendering a wide range of subtle transformations, adjustments, and contractions in my life. Most notably, it opened a rift between what I’d always been taught and my own experience of the world.

Like most Americans, I’d largely bought the common story about our justice system. All victims were equal in the eyes of the law. Criminals were evil people who freely chose to commit crimes and deserved harsh punishment as a result. Investigators dispassionately sorted through the evidence, and judges and jurors applied the law objectively to the facts they were given. The truth emerged through a meritorious clash of prosecutors and defense attorneys. Bad guys were caught and prisons worked to make us safer.

There had been moments in my earlier teenage years that had challenged the conventional narrative of a fair, logical, and objective criminal justice system. I’d watched the Rodney King video in disbelief and the riots that followed. Some of the eighth graders had organized a walkout of our junior high school. I’d talked about the O.J. verdict with my friends. But I’d boxed these incidents off, confined them in my memory, as anomalies—exceptions that proved the rule.

Suzanne’s death defied such treatment. We’d all expected the police
would quickly identify the murderer. We'd learn why Suzanne was attacked. There'd be a trial and swift justice. But days and then weeks and then months and then years went by. The cracks of doubt just seemed to widen, to branch. Law school provided an opportunity for repair: indeed, in most of my first-year classes, the conventional legal narrative was reinforced. The house of law was solid, lasting, built by people with incredible wisdom and foresight. Legal outcomes were determined by the law on the books. The adversarial system worked. Human beings acted like rational actors when they entered contracts, weighed the costs and benefits of breaking the law, and decided whether to buy insurance. Errors were rare; injustices were in the past.

But as I gained more experience and began to look more critically at what I was being taught, the doubt reappeared. Much of the great edifice of the law—the case holdings, statutes, and guiding legal principles—seemed to rest on untested assumptions. I started studying psychology and neuroscience—and when I became a law professor, I began running experiments—to understand how real jurors, judges, police officers, and others made decisions and where things went wrong. The further I progressed in my career, the clearer it became that this scientific account of human behavior did not support the legal one—quite the opposite.

Justice wasn't blind at all: black people faced greater police brutality and got longer sentences, more attractive witnesses were more likely to be believed, overweight female defendants were judged more harshly. Jurors and detectives, tasked with determining credibility, were actually quite poor at detecting deceit and tended to focus on irrelevant cues like averted gaze and jittery limbs. There was no such thing as an unbiased judge: every member of the bench was looking through lenses tinted by their identities and experiences. And factors meant to be irrelevant frequently tipped the scales. People whose parole hearings were first thing in the morning were far more likely to be granted release than those who had the bad luck of being scheduled at the end of the day. Watching footage of an interrogation with the camera placed behind the suspect meant that you were significantly more likely to deem a resulting confession to be coerced than if you viewed footage shot from behind the interrogator.

If our legal forebears had benefitted from the latest insights from neuroscience, they would never have organized our system around blame, with its prescientific building blocks of free will, mens rea, and the like. When you understand that all behavior ultimately derives from electrochemical interactions between neurons, and begin to appreciate the connection between dysfunction in particular areas of the brain and criminal actions, the dividing lines we set between good people and bad people, compelled behavior and chosen acts, sanity and insanity, become highly suspect.

In so many ways, we are not the people we believe ourselves to be, and our system does not deliver what we promise.

Nearly two decades later, I look back and see the investigation of Suzanne’s death in a very different light. I wonder now, for example, how much confirmation bias doomed the search for the killer. Humans have an incredible ability to fill in gaps and reach conclusions based on a very limited amount of information. That rush to judgment can be incredibly helpful in certain circumstances—say, deciding whether your kid is choking or whether a dog running towards you is likely to bite—but it can be catastrophic for a murder investigation. Ironically, the fewer facts we have, the simpler it is for us to come up with a coherent narrative and the more confident we are likely to be in its accuracy. Compounding the problem, we tend not to revisit our starting assumptions: instead, we seek information that reinforces what we already believe to be true and minimize and ignore contrary details. This has been shown to affect everyone from Supreme Court justices, who selectively sort through the evidence when they go in search of legislative facts, like whether police chases are inherently dangerous, to forensic analysts, who are more likely to find a fingerprint match when they know that the sample came from someone who already confessed. This tunnel vision can be a particular problem for detectives when they narrow their focus to a particular suspect early on in a case.

Within four days, the police had set their attention on James Van de Velde, Suzanne’s senior thesis advisor, a political scientist who lived a half mile from the crime scene. His name was leaked to the press and we all then saw him through the frame of guilt. Just like the police, my friends and I easily concocted a believable story: he must have been having a relationship with Suzanne or perhaps she spurned him—these things happened at universities, after all. The “proof” was easy to find. He’d worked in the intelligence community; the CIA must have trained him how to kill without leaving any evidence. No one could vouch for his whereabouts that night. Several people in the poli-sci department told the New York Times (anonymously) that “they found him frosty.”

Every fact supporting a theory of guilt was catalogued and when things didn’t quite line up, the police seemed to look to make them fit. James Van Pelt had seen a small red car speeding away from the scene where Suzanne’s body had been found. But when he talked to the police, he reported that “[t]hey kind of tried to tilt me a couple of times by suggesting maybe I didn’t see a red sedan, as I said—maybe I saw a Jeep, a red Jeep, which is I guess what Van de Velde has.” Similarly, one of Van de Velde’s students, Alison Cole, recalled that she was repeatedly pressured by detectives to explain her relationship with her professor and “when [she] answered multiple times that it was strictly teacher-student, they would
say: ‘Are you sure? You won’t get in trouble.’” These types of interactions can seem innocuous, but psychological research suggests that they can and do lead to wrongful convictions. Memory is incredibly fragile and malleable, and subtle signals and suggestions from the police can alter witness accounts. Indeed, when police provide false information to a witness—telling him, for example, that Van de Velde had been fired from Stanford for sexual harassment, as one of Van de Velde’s other students reported the New Haven Police did—that can alter his own recall of events. When they show an image of a suspect to an eyewitness, that can sway her to select that person in a later identification. The witness’s memory has potentially been corrupted and, if she picks the suspect out, there’s no way to know if she’s remembering the original criminal or the photo she was shown. In this case, the Hartford Courant reported that a woman who had seen a man running from near the crime scene was presented with a photograph of Van de Velde and then taken to his office for an in-person view. When she stuck to her guns saying that the man she’d seen wasn’t the professor, the detectives didn’t follow up—in all likelihood because they had their sights set on Van de Velde and her account didn’t fit that frame.

Equally unsettling, in interviewing Van de Velde himself, the police appear to have relied on deeply flawed, but commonly used, interrogation techniques that psychologists have shown to be highly coercive and lead to false confessions. As appears to have been the case here, a suspect like Van de Velde is usually brought in and given a series of softball questions meant to allow detectives to assess whether the suspect is lying. One of the problems is that detectives, as discussed above, struggle with that task, relying on inaccurate tells. Just as important, once they decide the suspect is lying, investigators aren’t meant to revisit that assumption, but instead simply to extract a confession by employing minimization and maximization strategies—a sort of good cop/bad cop routine. As Van de Velde described later, the detectives pressed him hard to confess, showing him graphic photographs of Suzanne’s body and saying things like, “We know it wasn’t the thesis, we know it wasn’t the thesis. Just tell us what it was.” There is no evidence that they were trying to force him to admit to a crime he didn’t commit. They just wanted to close the case and they thought Van de Velde was their guy. Unfortunately, good intentions are not enough: decent people with the most meritorious of motivations can create terrible injustice.

We are all walking around with blinders that make it hard to recognize where we are going astray. Consider the wildly inconsistent assessments of Van de Velde’s behavior made by both the police and public. When he initially talked to the police for hours without a lawyer by his side that was taken as a sign of clear guilt—in the words of former New Haven Police Chief Nicholas Pastore, “How many innocent people do you know who will sit there and answer questions for four hours?” When Van de Velde then hired a prominent criminal defender, Ira Grudberg, that, too, was a sign of clear guilt. No one seemed to notice the contradiction because that’s how our minds work. I wrote my book, Unfair: The New Science of Criminal Injustice, because I am convinced that everyone needs to understand the nature and magnitude of the threat our justice system faces. And that’s why I’ve been traveling around the country speaking with judges, prosecutors, defenders, forensic
scientists, and members of the general public. Even people working in the system do not grasp the scope of the problems or the realistic steps we can take to address them.

In advocating for evidence-based reforms to policing, adjudication, and corrections, many of the most rewarding interactions I’ve had have been with non-experts—indeed, with young people. These exchanges are rarer than I’d like. And I think a big part of that has to do with a reluctance to bring the disconcerting research from the mind sciences to young people. “We need to protect them—it’s just too heavy,” I’ve heard people say. “Let’s show students all the ways things work well first, before we disillusion them,” others add.

I strongly disagree.

For one thing, many teenagers have already experienced or are experiencing our failed criminal justice system. We know this from the survey data and I know this from teaching young people, who, every semester, tell me about sexual assaults they have suffered, attempted murders they have witnessed, robberies and break-ins they’ve lived through. They have friends and family members locked up behind bars. They have parents, cousins, and partners who are cops, prison guards, and defenders. It seems particularly absurd to argue that kids need to be protected from learning the truth about police stops, prosecutions, and prisons, when we don’t protect them from actually being stopped by the police, charged as an adult, and sent to an adult correctional facility.

The critics are wrong that young people aren’t capable of being part of the conversation on criminal justice reform. There is no neuroscientific or psychological evidence to suggest that teenagers are incapable of understanding the key issues and what is at stake. Indeed, when I’ve given talks recently about the cutting-edge of criminal justice—the potential to use virtual reality to control for biased assessments at trial, the dangers of fabricated audio and video evidence, the potential for algorithms to assess guilt—I’ve noticed a very distinct pattern of understanding by age: the younger the audience members, the more familiar they are with the underlying technology and the sharper the questions that they ask.

When it comes to reform, teenagers also have more of a stake in the outcome. A teenager is far more likely to be the victim of a violent crime, far more likely to be harassed by the police, and far more likely to be arrested than someone older than 65. And a teenager today has many more years to live with the consequences of our failed policies than a retiree, whether that’s measured in tax dollars spent on mass incarceration, depressed educational attainment and lost economic productivity in high crime neighborhoods, wrongful convictions, or lives lost to gun violence.

Young people deserve to be told the truth, even the painful truths that shake their faith in our existing institutions and norms. As a law professor, I see one of my main jobs as teaching skepticism. The best lawyers have a skeptical eye. The problem is that in law there is a particularly strong deference to the status quo—indeed, to the past. My students come in assuming that the cases in my Criminal Law casebook were all decided correctly and that the criminal code provisions we study are fair and effective. They assume that the people who gave us our laws, precedents, and procedures were smarter and more enlightened than they are. That’s a dangerous mindset and we would do well—all of us—to combat it. In nearly every other field of inquiry innovation is encouraged and rewarded. So why not in law?

Imagine if students in computer science or biomedical engineering or automotive design were told to focus on the past, to accept the existing solutions as optimal, to focus simply on mastering the tools as they exist. It wouldn’t make sense and it doesn’t make sense for our future judges, lawyers, police officers, and corrections workers either. They, too, need an innovation outlook.

Questions

1. How did the author’s personal story of a murdered classmate influence his career?

2. “Memory is incredibly fragile and malleable.” What does this mean?

3. What surprised you most about the author’s psychological and neuroscience research?

4. What does the research tell us about our criminal justice system?

5. Based on mind research, how might police actions influence the memories of witnesses? Consider the examples discussed from Suzanne’s murder investigation.
   a. questions can be suggestive
   b. false information may corrupt memory
   c. photo line-ups, personal line-ups may corrupt memory
   d. flawed interrogation techniques
   e. inconsistent interpretations of questioning with or without a lawyer

6. What is confirmation bias and what role may it have played in the investigation of Suzanne’s death? (preconceived assumptions can minimize contradictory evidence)

7. The author asserts that young people deserve to know the truth about mind sciences and our criminal justice system. Do you agree or disagree? Support your position.

8. What evidence-based reforms do you think will be most effective?

Just as psychology and neuroscience have revealed the flaws in our criminal justice architecture, they can also offer a new blueprint for remaking the system based upon a realistic model of human behavior. If the next generation embraces evidence-based best practices and has the courage to challenge convention, we will have the chance to achieve the justice we seek and that Suzanne has long been denied.
Learning Gateways

Could Minority Report Be Right?

by JoEllen Ambrose

Lesson Description: This lesson asks students to consider the fictitious futuristic criminal justice system depicted in the 2002 Steven Spielberg movie, Minority Report. Students answer these questions, “Could the 2054 DC Precrime system be right? Could it produce fair results? Could it be just? Is it possible?” Students will evaluate the fundamental principles and values upon which the U.S. criminal justice system has been built.

Objectives
Students will increase their understanding of underlying principles and values in our criminal justice system.

C3 Framework for Social Studies Standards
D2.Civ.10.6–8. Explain the relevance of personal interests and perspectives, civic virtues, and democratic principles when people address issues and problems in government and civil society.

GRADES: 9–12
DURATION: One class period

MATERIALS: Descriptions of present-day U.S. criminal justice system and a fictitious futuristic precrime criminal justice system portrayed in the 2002 movie, Minority Report, which was based on Phillip K. Dick’s short story. Student handout on assigned role.

Procedure
1. Introduction: The U.S. criminal justice system is built on principles of procedural fairness. For example, a crime is committed when a person commits an act that is clearly defined as illegal under the law. The system presumes the defendant is “innocent until proven guilty.” A person’s liberty is not deprived without “due process of law.” Those accused of crimes have constitutional protections including a speedy and public trial and the right to remain silent. The state must prove guilt “beyond a reasonable doubt.” And legal errors can be corrected in an appeals process. How important are these principles to our society? By peering into a fictitious futuristic criminal justice system in the movie, Minority Report, we can better understand our own criminal justice system.

Anderton presides over an operation controlling three “Pre-Cogs,” precognitive humans who drift in a flotation tank, their brain waves tapped by computers. They’re able to pick up thoughts of premeditated murders and warn the cops, who swoop down and arrest the would-be perpetrators before the killings can take place.

In the first scene of the movie, the Pre-Cog Agatha has a vision of a double homicide and speaks the word, “murder.” Her mind’s images produce a “red” ball indicating that a crime of passion, a murder without premeditation, will soon take place. The red ball identifies the future murder victims. The case is numbered and the investigation begins.

Anderton calls witnesses to verify Agatha’s images as he manipulates them on a computer interface that floats in mid-air. In a process called ‘scrubbing the image’ the investigators look for clues as to the location of the crime and the identity of the future murderer. Police dispatch to the scene and at the last possible moment arrest the defendant, Howard Marks, before he commits the act of murder. Marks is arrested for the future murder of two victims and is sent to prison.

The following scene plays a commercial promoting the DC precrime system as part of a proposed nationwide initiative. Potential victims tell how they were saved from future crimes. The commercial claims precrime never gets it wrong, but leaves the viewer wondering if the system is always right.

View these scenes:
Minority Report Movie Trailer
https://www.youtube.com/watch?v=aGWQYgZZEEQ

Scene 1: Pre-Crime Unit investigates a future murder
https://www.youtube.com/watch?v=6yt9aMZQWyU

Scene 2: Arrest of Howard Marks and National PreCrime initiative commercial
https://www.youtube.com/watch?v=BmSarhudiY

2. Introduce 2054 DC Precrime system by viewing selected scenes from the 2002 movie, Minority Report, based on Philip K. Dick’s short story. Here is a summary of the film’s premise and depiction of an alternative criminal justice system:

The year is 2054. The place is Washington DC where futuristic skyscrapers coexist with the famous Washington monuments and houses from the 19th century. John Anderton is the chief of the Department of Pre-Crime in the District of Columbia. “Pre-Crime” describes the district’s criminal justice system because it prevents crimes before they can happen. In the six years it has been in operation there have been no murders.

Scene 1: Pre-Crime Unit investigates a future murder
https://www.youtube.com/watch?v=6yt9aMZQWyU

Scene 2: Arrest of Howard Marks and National PreCrime initiative commercial
https://www.youtube.com/watch?v=BmSarhudiY
3. Class discussion on the 2054 DC Precrime unit:
   • What is a crime?
   • Who is a criminal?
   • How is guilt determined? Summarize how the Precrime system works.
   • How do you view pre-cogs? Are they eyewitnesses? Could pre-cogs ever really exist? Do they predict crime or prophesy about it? Do they get it right? What happens if they are wrong?
   • What does 2054 DC Precrime system tell us about our criminal justice system?

4. Describe general steps taken in the two criminal justice systems.

<table>
<thead>
<tr>
<th>General Steps</th>
<th>U.S. Criminal Justice System</th>
<th>2054 DC Precrime Unit</th>
</tr>
</thead>
</table>
| Crime         | • Criminal act (conduct that is prohibited by law) takes place  
                • Crime is reported | • Criminal act (conduct that is prohibited by law) is going to happen in the future  
                • 3 pre-cognitive beings housed in the pre-crime laboratory have visions of future crimes  
                • A vision triggers an alarm |
| Investigation | • Police gather physical evidence, interview witnesses, question suspects  
                • Police seek search and arrest warrants from judge  
                • Attorneys for the state decide whether to charge the crime  
                • Defendant has right to lawyer | • Vision is analyzed by police detective at Precrime unit  
                • Police arrest “criminal” prior to committing crime |
| Trial         | • Judge rules on reliable and relevant evidence to be presented at trial,  
                • Witnesses testify  
                • Prosecution has burden of proof in proving guilt beyond a reasonable doubt  
                • Defendant has right to cross-examine witnesses, present own witnesses and right to remain silent, et.al.  
                • Judge instructs jury on law  
                • Jury considers evidence and law to determine guilt  
                • Trials are open to the public | • Recording of vision is only evidence presented to witnesses in conference call  
                • Pre-cog images determine guilt |
| Punishment    | • Judge sentences guilty person | • Judge sentences guilty person |
| Correcting mistakes | • Defendant can appeal to a higher court to review record for legal errors | • No formal review  
                • Visions are kept in a vault  
                • Possible existence of a minority report doubting the certainty of vision |
5. Divide class into pairs or small groups. Assign each group a role in the criminal justice system.
   - Group 1 - you are a witness
   - Group 2 - you are a police investigator
   - Group 3 - you are a prosecutor
   - Group 4 - you are the defendant
   - Group 5 - you are a judge
   - Group 7 - you are a juror

6. Complete student handout in your group discussion using the chart on general steps in each system. Student handout asks students to compare/contrast assigned role in both the present and futuristic criminal justice system. Students discuss the question: Could the 2054 DC Precrime system be right? Could it produce fair results? Could it be just? Is it possible?

7. Each group reports to class their answer to the question:
   - According to your role’s perspective, does *Minority Report* get it right or wrong? Does the precrime system produce fair results?

8. Conclusion:
   - The 2054 DC Precrime Division is a futuristic fictitious system not intended to be a viable system. Which parts of Precrime are not viable? Which parts are possible with future technologies?
   - What core values and principles found in our U.S. criminal justice system are missing in pre-crime?
     - a crime is a criminal act committed by a person
     - innocent until proven guilty
     - guilty beyond a reasonable doubt
     - due process of law
     - rights of accused in Bill of Rights

   **No person. . .shall be compelled to any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without the due process of law**
   —Fifth Amendment to the U.S. Constitution

   **In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury. . .**
   —Sixth Amendment to the U.S. Constitution

   - What does *Minority Report* tell us about our U.S. criminal justice system?

JoEllen Ambrose is a lawyer and educator from Minnesota. She is a past recipient of the Isidore Starr Award for Excellence in Law-Related Education.
Role assigned: _______________________________ (witness, police investigator, prosecutor, defendant, judge, juror)

Compare/contrast your role in both the present day and futuristic criminal justice systems. Complete the following chart.

<table>
<thead>
<tr>
<th>Role</th>
<th>U.S. Criminal Justice System</th>
<th>2054 DC Precrime Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe your role in each system.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is your goal?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What actions do you take?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What kinds of decisions do you make?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is your role limited in any way?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explain any limitations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>How important is your role in determining guilt?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What changes or improvements would your role like to see?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From your role’s perspective, answer the following questions. Could the 2054 DC Precrime system be right? Could it produce fair results? Could it be just?
Learning Gateways

Weighing In on the Evidence
by JoEllen Ambrose

Lesson Description: In this lesson students individually and in small groups rank different types of evidence for their reliability and importance to jurors. Students then reconsider rankings after exposure to brain research studies.

Objectives
Students will be able to:

• understand the role jurors play in evaluating evidence.
• describe the differences between reliable and less reliable evidence used in court trials.

C3 Framework for Social Studies Standards
D2.Civ.2.6–8. Explain specific roles played by citizens (such as voters, jurors, taxpayers, members of the armed forces, petitioners, protesters, and officeholders).

GRADES: 9–12
DURATION: One class period
MATERIALS: Survey handout, Class chart, Brain research studies described in Insight articles

Procedure

1. Introduction: As a citizen you may be summoned to serve on a criminal jury. Your duty is to determine if the defendant is guilty or not guilty. The prosecution must prove the defendant is guilty beyond a reasonable doubt. At the trial many different types of evidence will be presented through witness testimony. During jury deliberations, you will consider how important each piece of evidence is in deciding guilt. Today’s lesson asks you to examine more closely the importance of different types of evidence.

2. Ask students to rank different types of evidence on a survey.

SURVEY: Which type of evidence presented at trial is most valuable in determining whether a defendant is responsible for a crime? Rank each type of evidence from 1 (MOST RELIABLE) to 10 (LEAST RELIABLE)

_____ expert testimony
_____ police investigator
_____ fingerprint evidence
_____ DNA testing
_____ eyewitness testimony
_____ video of the scene
_____ lie detector test
_____ photograph of the scene
_____ confession
_____ bite marks

3. Divide class into small groups and:

• compare survey rankings 1–3 and 8–10
• reach a consensus on top 3 and bottom 3, be prepared to explain your choices
• on class chart record a + (plus) under Most Reliable column for each of your top 3 most reliable types of evidence and record a – (minus) under Least Reliable column for each of your 3 least reliable types of evidence
• total the marks on each evidence line in both columns
• Which types of evidence do we rank as most reliable? least reliable?

4. Ask class:

• Looking at our most reliable types of evidence, what do they have in common? How are they different from our least reliable types of evidence?
• What factors make evidence more reliable? less reliable?
• What questions do you have about any of these types of evidence? What information do you need to know about evidence presented in court?
5. What do psychology and brain research tell us about certain types of evidence? In this issue of *Insights*, authors refer to brain research studies and their impact on courtroom evidence. Two studies are summarized below. In pairs, read each summary and discuss how this new information affects your rankings. Then re-evaluate your rankings for eyewitness testimony and confessions. Did you make changes? Explain.

### Memory research and eyewitness testimony by victim

How accurate is human memory when confronted with a realistic and personally relevant threat? A series of experiments was conducted with elite military personnel undergoing military survival school training. Participants endured physical aggression and intimidation tactics during a mock interrogation such as being physically struck and stared down. Cortisol levels during this phase of training were equivalent to jumping out of an airplane for the first time. Despite the elite training of these military individuals, approximately two-thirds of participants later misidentified their interrogator in a line up even though they had a clear view of their interrogator’s face for 30–40 minutes.

*Source: Study cited in article working title, “The reliability of eyewitness testimony: What psychological research tells us about the limitations of memory.”*

### Research on videotaped confessions

How accurate are videotaped confessions by the defendant? In a series of experiments led by the psychologist G. Daniel Lassiter of Ohio University, mock juries were shown exactly the same interrogation, but some saw only the defendant, while others had a wider-angle view that included the interrogator. When the interrogator isn’t shown on camera, jurors are significantly less likely to find an interrogation coercive, and more likely to believe in the truth and accuracy of the confession that they hear—even when the interrogator explicitly threatens the defendant.

*Source: Can a Jury Believe What it Sees? Videotaped Confessions Can Be Misleading by Jennifer L. Mnookin, July 13, 2014*

### Extension Activity:

Ask students to explore *Insights* articles for other research examples and explain how they connect to different types of evidence.

6. **Conclusion:** What does research tell us about evidence? What role does a juror play in evaluating evidence? Summarize today’s activity by identifying 3 key tips jurors should remember when weighing evidence.

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JoEllen Ambrose is a lawyer and educator from Minnesota. She is a past recipient of the Isidore Starr Award for Excellence in Law-Related Education.
In this issue of Teaching Legal Docs, we will consider the forensic psychology report. In order to do so, we should first present a working definition of forensic psychology itself. Generally speaking, it is the application of clinical psychology to legal matters. Forensic psychology textbook author Christopher Cronin has also characterized it as “legal psychology” and offered this broad but succinct definition: “The scientific study of the effect of the law on people, and the effect people have on the law.”

Forensic psychologists are commonly required to offer clinical evaluations of individuals who are “involved” with the legal system. This typically entails interviewing the individuals being evaluated and may require testifying orally in court as expert witnesses. However, essential to these evaluations is also writing a forensic psychology report. “Reports are a major work product of forensic psychologists. Although some cases lead to testimony, almost all cases result in a forensic report.”

One of the most important uses of these reports is to assess criminal responsibility or competence to stand trial. Experts emphasize that “insanity” is a legal and not a psychological or clinical concept—one that is effectively given definition in state and federal statutes.

The Forensic Psychology Report

by Howard Kaplan

The Forensic Psychology Report

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Anatomy of a Forensic Report

Since the 1980s, the forensic psychology report, as used to evaluate competence to stand trial and offer other clinical assessments for legal purposes, has become increasingly structured in its organization and content. This has been described as its “anatomy.” Experts have set out guidelines and developed checklists to establish standards, critique commonly found deficiencies, and provide practical assistance to report writers. Indeed, the use of these guidelines and checklists to encourage best practices facilitates the standardization of reports.

Forensic psychology reports typically begin a first section with introductory and contextual information about the assessment—the evaluatee (name, age, gender, etc.), evaluator (name, qualifications, location of assessment), purpose of the evaluation and, if a criminal matter, what the defendant is alleged to have done. Reports typically state legal criteria. For instance, a Massachusetts criminal responsibility report would state that a defendant is competent to stand trial in the commonwealth’s courts if “he has sufficient present ability to consult with his attorney with a reasonable degree of rational understanding and if he has a rational as well as factual understanding of the proceedings against him” (Commonwealth v. Vailes, 1971).

Reports also often specify warnings of the limits of confidentiality. Evaluators must inform evaluatees that they will be submitting written reports or even giving oral testimony based on their evaluations. Required reports are submitted whether or not individuals consent to being evaluated, which they are not obligated to do. Reports indicate their sources of information, which include interviews with individuals being assessed, their family members, health and legal professionals, as well as pertinent records.

The second section of forensic reports presents data, providing a nar-
rative formed from “relevant history,” which may go back to the individual’s childhood and cover matters such as family history, education, mental health and general medical history, laboratory tests, and work history.

The third section of the reports features discussion and conclusions. It may include an assessment of the individual’s current mental functioning at the time of the interview, including appearance, affect, behavior, and cognitive functions. If the individual has been charged with a crime, the report will usually present versions of the alleged offense from police and from the defendant. Forensic psychology reports conclude with clinical opinions, based on the available data. If a criminal matter, they would include the evaluator’s clinical opinion as to the evaluatee’s competence to stand trial, as well as need for care and treatment.

Forensic Report as Narrative

Other specialists may prepare written reports to memorialize or document their practices but, for forensic experts, the report itself is their “practice-product.” In these reports, they must write primarily not for other experts in their fields, but to “translate” their expertise into language understandable to legal professionals and even public audiences. Moreover, they are responsible for articulating, in written form, expert opinions and assessments that may have significant personal and social consequences on matters of life and liberty.

Recent commentators seeking to conceptualize these reports, therefore, have even emphasized that they might be viewed as a type of “literary activity” in which “the act of writing the report requires the translating of actual events onto the page” and the role of report writers should be to “transform the information into a narrative, making the events and the actors come to life and evoking emotions in the reports’ audiences or readers.”

Forensic report writers, hence, can be regarded as storytellers as well as clinicians in their practice. In writing accounts to be persuasive as well as descriptive, they need to consider both what they are putting in and what they are leaving out from the narrative design of the report, such as in sections on “relevant history” of the evaluatee.

Psychiatrist Robert Wettstein has summarized the unique legal documentary and literary qualities of the forensic report, which “are thus a blend of science and art. …experts interpret, reinterpret, construct and reconstruct the evaluatee’s factual data into their unique formulation in the forensic report intended to persuade a legal audience.”

Howard Kaplan is an associate director in the American Bar Association Division for Public Education.

Seeing Bugs Bunny at Disney World

The Reliability of Eyewitness Testimony

by Joyce Lacy

Jennifer Thompson, a confident 22-year-old with a bright future, was nearing her college graduation with a perfect 4.0 GPA. She and her boyfriend were talking of getting married soon. Life was good. But one July evening, everything changed. She awoke in the middle of the night to a blade pressed against her throat and a man sitting on her legs. Despite her fear and panic, she forced herself to focus on the identifying features of her assailant. Jennifer survived that night by remaining alert and eventually fleeing to a neighbor’s house. Soon after, she would identify Ronald Cotton as her assailant in a lineup and again in court. The prosecution could not have asked for a more prepared and confident witness. She had studied her assailant’s face, noted his almond-shaped eyes, high cheekbones, and shadowy mustache. Cotton was convicted, and he would serve over 10 years in prison before being exonerated by DNA evidence. How could Jennifer, the straight-A college student, have been wrong?

It is an unfortunate misperception that memory is like a video recorder, faithfully recording our experiences and preserving these details so that they can be reviewed at any time. Recalling information from our memories is such a mundane experience that we rarely have reason to doubt its accuracy. In cases when our everyday memory does fail us, the repercussions are typically minor or insignificant such as forgetting to run an errand or misremembering the source of a famous quote. However, when it comes to eyewitness testimony in cases of law, the accuracy of memory is paramount. Recalled memories may be the major evidence, sometimes even the only evidence, against a defendant. Additionally, eyewitness testimony is often heavily weighted in court. Research has shown that mock jurors are more likely to vote “guilty” when there is an eyewitness account than in identical cases sans an eyewitness.

In one study, mock jurors read about a grocery store robbery where the owner was killed. In the control group with no eyewitnesses, only 18% of mock jurors voted guilty. This served as a baseline to show how convicting the evidence was in this scenario. From the 18% of guilty votes, one can see that the evidence was only somewhat convincing. When a different group of mock jurors was given identical evidence plus the addition of a store clerk as an eye-
witness, the percentage of guilty votes rose to 72%. The most striking finding of this study was that even when the eyewitness testimony was discredited (e.g., the clerk was known to have poor vision), nearly the same percentage of jurors (68%) voted guilty. Thus, even highly questionable eyewitness testimony is convincing. It is important to note that eyewitness testimony is not always faulty, but situations like Ronald Cotton’s show us that memory can be faulty and lead to wrongful convictions. How and why does our memory fail us? More than four decades of psychological research has much to tell us.

Let us rewind to the 1970’s where Elizabeth Loftus, a recent Stanford Ph.D. alumnus, was beginning her research career as a professor at the University of Washington. She had aspirations to move from her roots of researching fundamental concepts of memory towards something more immediately impactful to society. Thus, she began to study how memories could be modified. Modifying memories is not like in the movies Total Recall or Inception where professionals surgically implant fake memories into your brain. Loftus was looking for natural experiences that cause one’s memory of an event to reflect something different from what actually happened. Little did she know that she would become the pioneer of an entirely new field of research around what we now refer to as “false memories.”

Loftus began this work by looking at the effect wording can have on an individual’s memories. She started by showing people films of car accidents and then asking them questions such as, “How fast were the cars going when they smashed into each other?” On average, participants asked this question reported higher speeds than participants shown the same film but asked the question with the word smashed replaced with the word hit. Even more intriguing was that in a follow-up question, participants given the smashed witness, the percentage of guilty votes rose to 72%. The most striking finding of this study was that even when the eyewitness testimony was discredited (e.g., the clerk was known to have poor vision), nearly the same percentage of jurors (68%) voted guilty. Thus, even highly questionable eyewitness testimony is convincing. It is important to note that eyewitness testimony is not always faulty, but situations like Ronald Cotton’s show us that memory can be faulty and lead to wrongful convictions. How and why does our memory fail us? More than four decades of psychological research has much to tell us.

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There is a large body of psychological literature that suggests when interviewers have preconceived notions of the “correct” answer, they can (intentionally or not) bias an individual’s response.

Wording effects are subtle and perhaps a far cry from misremembering a face, as in the case of Ronald Cotton. However, this nascent field bloomed into a much richer body of research surrounding the impact of questioning, interrogation, and post-identification feedback. There is a large body of psychological literature that suggests when interviewers have preconceived notions of the “correct” answer, they can (intentionally or not) bias an individual’s response. This may be through verbal conversation, tone of voice, or body language. For example, asking an eyewitness after they made an identification, “Are you sure?” with a certain type of inflection may cause a witness to doubt their original choice and pick an alternative. Additionally, post-identification feedback can alter an individual’s subsequent identifications or their perception of other factors surrounding their identification such as their level of confidence. Positive post-identification feedback such as “Good job!,” ”You picked the suspect,” or “Another witness chose the same person” increases confidence. Likewise, negative feedback decreases confidence. Sources of post-identification feedback also include crosstalk between witnesses and media coverage. In research studies, participants who received confirming feedback also reported having paid more attention to the perpetrator’s face and having better views of the perpetrator than witnesses who did not receive this feedback. Confidence is generally considered an indication of accuracy, and in many cases this relationship is true, but it is not a perfect relationship. High confidence is not always an indicator of memory accuracy as can be seen in Jennifer’s account. However, confident witnesses are considered more believable and are more willing to testify in court.

Cotton appealed his conviction and was granted a retrial two years later.
In the intervening time, a new inmate arrived at the same prison that Cotton was in. His name was Bobby Poole. They had similar appearances. They looked so alike that a kitchen steward at the prison often confused them with each other. At one point, Poole confessed to another inmate that he was Jennifer's real assailant, although he denied this in a voir dire examination at Cotton's retrial. Once again, Jennifer unequivocally identified Cotton as her assailant. DNA evidence would eventually confirm that Poole was the real perpetrator. But how could Jennifer be wrong again, especially with her actual assailant sitting in the courtroom? It was almost as if she had no memory of Poole's face, as if Poole's face was replaced with Cotton's.

Thus far, the psychological research illustrates that memories are malleable and susceptible to suggestion. It is one thing to change minor details about a memory, but is it possible to create an entirely false memory? Loftus began investigating this possibility in the 1990's. She started with a simple false scenario: being lost at the mall as a young child. The researchers first confirmed with the participants' caregivers that no such event had actually happened. Caregivers also provided details of three real events that participants experienced as young children, and participants were presented with all four “memories” without being told that one was false. Not all participants accepted the lost-in-the-mall event as a real memory, but a statistically significant percentage (approximately one fourth) of participants did.

Many studies have replicated this ability to instill whole events into participants' memories. In research, these are referred to as “rich false memories.” Although the rate of success varies from roughly 15 to 70%, meta-analyses suggest that on average approximately a third of participants in these research models adopt a false memory. These studies began with relatively innocuous memories—participants have falsely remembered spilling a bowl of punch at a wedding or meeting Bugs Bunny at Disney World (Bugs is a Warner Brothers character). However, other studies involved mild levels of trauma such as nearly drowning or being viciously attacked by an animal. In all of these
Elizabeth Loftus began studying eyewitness testimony, including its reliability, in the 1970s as an early professor. Images courtesy of the National Academy of Sciences.

experiments, researchers reveal to the participants at the conclusion of the study that these memories are indeed false and that no such event happened.

The most recent false memory experiments are the most realistic. For example, one 2015 study attempted to convince college aged participants that they had committed a crime (a theft, assault, or assault with a weapon) between the ages of 11 to 14. By the end of three interviews over the span of approximately two weeks, 70% of the participants believed they had actually committed the crime and they provided additional details of the event. Other memory studies take advantage of real events such as national tragedies. In one study, Russian participants misremembered seeing wounded animals near a scene of a terrorist bombing that occurred in Moscow a few years prior. Several studies have replicated this phenomenon of how we frequently misremember the details of a tragic national event. After the explosion of the Challenger space shuttle in 1986, participants were asked how they heard the news shortly after the event and then again three years later. More than one third of the reports were inaccurate. For example, participants who initially heard from a friend later misremembered first hearing of the explosion from watching TV. This pattern of results was also seen in studies probing participants’ memories of the 9/11 New York City terrorist attacks.

There are many ways to create or modify memories. A simple method of modification is by providing misinformation after the original event. Loftus discovered this phenomenon in the 1970’s. Once again, she showed participants films of traffic accidents. This time, she discovered she could modify participants’ memories of the original event by implying a bit of misinformation. For example, if participants viewed a car stopping at a stop sign but were later asked about a yield sign, a significant percentage of participants misremember seeing a yield sign in the original film. Post-event misinformation is thought to employ the same mechanism as post-identification feedback previously discussed. Other research models ask participants to recall information of multiple previous events; however, participants are unaware that one of these events is actually false. This is the mechanism by which rich false memories have been instilled. Another method that may be used is asking participants to imagine events. In one study, participants were asked to either perform or imagine a variety of events such as rolling a pair of dice or kissing a plastic frog. At later questioning, a significant number of participants misremembered actually performing some of the imagined events.

When participants adopt rich false memories as their own, they feel confident that they actually happened and they often add their own details, which can include sensory perceptions such
as shaking Bugs Bunny's hand and hearing him say “What's up, Doc?” They even add their own subjective experiences such as their feelings during the event and their rationale of thinking. Psychological research offers an explanation for how and why participants might fill in these details. We often make use of schemas, or scripts, of typical experiences to help us navigate our day-to-day lives. Thus, when asked to recall information, we fill in details from our expectations of an event. For example, in one study, participants first listened to an audio recording of a mock trial. A significant number of these participants later recalled details from the trial that were not actually stated, but which fit a typical description of that crime (e.g., a robber pulling out a weapon). Interestingly, participants also had difficulty differentiating between statements from the eyewitness and what was implied in misleading questions from the attorneys, that is, some of the details implied in the attorneys’ questions were misremembered as being stated by the witness.

Critics have argued that the mild levels of trauma occasionally employed in research studies are not realistic enough and are not the same as a personally experienced crime. However, an interesting set of experiments in elite military personnel speaks to the accuracy (or lack thereof) of human memory when confronted with a realistic and personally relevant threat. In these studies, participants were undergoing military survival school training and, therefore, could be subjected to objectively high levels of stress during the mock prisoner of war phase of training. Participants endured physical aggression and intimidation tactics during a mock interrogation such as being physically struck and stared down. Cortisol levels during this phase of training were equivalent to jumping out of an airplane for the first time. Despite the elite training of these military individuals, approximately two-thirds of participants later misidentified their interrogator in a lineup even though they had had a clear view of their interrogator's face for 30-40 minutes.

If psychological studies are not evidence enough that false memories can occur, DNA evidence verifiably proves that false memories do indeed occur. The Innocence Project is a non-profit legal organization that was founded in 1992 with the goal of raising awareness of wrongful convictions and advocating for reform in the criminal justice system. The Innocence Project was involved in Cotton's case. By the most recent statistics in late 2017, there have been 351 cases of wrongful convictions overturned by DNA evidence. Experts agree that this represents only a fraction of wrongful convictions since most crimes do not have access to viable DNA. The average exoneree served 13 years in prison before being released. Several cases involved inmates on death row. Typically, there is little retribution or support after exoneration. What makes this so relevant to false memory is that eyewitness misidentification is the leading cause of false convictions. In fact, 70% of the convictions overturned by DNA evidence originally involved an eyewitness misidentification.

It may surprise you to hear that Jennifer Thompson and Ronald Cotton are actually close friends today. After Cotton's release, Jennifer was wracked with guilt about her misidentification. They were both 22 years old when Poole broke into Jennifer's home. In the ten years since that fateful night, Jennifer moved on, got married, and had kids. All the while, Ronald Cotton was deprived of those opportunities. It took Jennifer two years after Cotton's release for her to work up the courage to meet him. When she finally did, Jennifer blurted out a tearful apology, and in an amazing display of grace, Cotton's first words to Jennifer were words of forgiveness. They have since developed a close relationship. They co-authored a memoir together, Picking Cotton: Our Memoir of Injustice and Redemption,” and they travel the nation together advocating for the rights of the wrongfully convicted.

So, where do we go from here? Psychological research has shown that memory is not infallible and alterations to memory are possible. However, this does not mean that we should completely remove the use of human memory in law. In many cases, memory is indeed accurate and still provides valuable evidence. A better approach is to educate law enforcement, legal practitioners, and the general public about the nuisances and limitations of memory and to reform our policies to better reflect the probative value of eyewitness testimony and other forms of memory in court. Lastly, psychological research on aspects of memory pertaining to law is ongoing. Greater collaboration between the fields of psychology and law would help refine and direct research as well as apply its findings to actual court cases.
Are You a Good Eyewitness?
by JoEllen Ambrose

Lesson Description: In this lesson, students participate in a memory exercise to help understand the limitations of memory and accuracy of eyewitness identification. Students will act as witnesses or police in a crime investigation. Teacher conducts a direct and cross exam of eyewitness and class weighs value of eyewitness testimony from the perspective of a juror.

Objectives
Students will be able to:
• recognize the limitations of memory and eyewitness identification accuracy.
• examine accuracy of memory recollections by roleplaying witnesses, police, and jurors.

C3 Framework for Social Studies Standards
D2.Civ.10.6–8. Explain the relevance of personal interests and perspectives, civic virtues, and democratic principles when people address issues and problems in government and civil society.

GRADES: 9–12
DURATION: One class period
MATERIALS: Memory exercise, The Original Selective Attention Task Video online at http://www.theinvisiblegorilla.com/videos.html and Diagram of crime scene

Procedure
1. Introduction: What is memory? How does memory work? Is our brain like a video recorder? If you observed an event could you remember everything that happened? Why or why not? Today we will experience how our memory works as we roleplay witnesses, police, and jurors.

   • Did you see the gorilla? Why not?
   • What limits our ability to recall events accurately?
   • In the invisible gorilla movie, our attention was focused on counting passes and you may have missed seeing the gorilla. Our mind may not remember all that happens in an event because our brain is engaged in another way.

Extension Activity:
To learn more about how memories can be altered watch psychologist Elizabeth Loftus discuss her research on Ted Talks. Loftus studies false memories, when people either remember things that didn’t happen or remember them differently from the way they really were. View Professor Loftus on Ted Talks published September 23, 2013 at https://www.youtube.com/watch?v=PB2Oeql6wvl

3. Activity: Are you a good eyewitness?
Adapted from Lesson 11–4: Being A Good Witness, Lawyers in the Classroom @ Constitutional Rights Foundation
**Procedure**

1. Pair students and hand out to one student the crime scene diagram turned upside down. This person will be acting as a witness to a possible crime. At signal, witness turns paper over and views scene for 15 seconds. After time is called ask witness to turn paper over.

2. Partner will act as a police officer and question the witness about what they saw. Police record notes on paper and will report to class.

3. When interviews with witnesses are done, ask a first police interviewer to give their report. Teacher records observations on board. Teacher should not ask clarifying questions as it may suggest information.

4. Ask the next police interviewer to share what their witness saw. Teacher circles on board facts that had been shared earlier and writes in a separate space any additional facts or facts that contradict earlier reports.

5. Repeat for all police reports. Witnesses do not talk. The board is filled with uncategorized observations.

6. Ask class, What was observed by our eyewitness? Do we know what happened? When? Where? Who? Do we have a description that helps us accurately identify any suspect? Are witness memories the same? How is it witnesses remember things differently? Will the eyewitness testimony in court be convincing to a jury?

7. Students can reexamine the diagram to determine the accuracy of their witness memory and police report.

8. Now let’s pretend the witness is testifying at trial. Ask a student to roleplay the witness by answering questions in court. Teacher roleplays the prosecutor in a direct exam and the defense attorney in cross examining the witness. Class acts as jurors observing the eyewitness testimony.

   **Direct exam of witness (volunteer student) by prosecuting attorney (teacher)**

   - Good day. Please state your name and address for the record.
   - Where were you on the day in question? What time was it?
   - Can you describe the location?
   - What did you see happening?
   - Can you describe the individuals? features? clothing? personal items?
   - Can you identify in this courtroom the person(s) you saw that day?
   - —students can identify a pretend defendant
   - Let the record indicate the witness has identified the defendant in this case.

   **Cross exam of witness (same student) by defense attorney (teacher)**

   - Good morning. You have identified the defendant today as the person you saw, is that correct?
   - Now isn’t it true that you were standing across the intersection about some 30 feet away? (Teacher nods head up and down to cue a yes response)
   - And during this time of day the intersection is very busy with traffic, correct?
   - And isn’t it true, you were not wearing any glasses at the time?
   - When you saw the gun you were afraid, correct?
   - Is it possible that as soon as you saw the gun you turned away for safety?
   - That will be all, thank you.

9. Class discussion with students who listened as jurors. Pretend you are now in the jury room and deliberating whether the defendant is guilty or not guilty. You must all agree on your decision. In your deliberations consider the following questions:

   - What does the witness testimony prove in this case?
   - How important is the eyewitness account?
   - Is the eyewitness account accurate?
   - What factors may limit the witness’s recollection? (sensory limitations due to traffic, no corrective lenses, and emotional response)
   - As a juror in the courtroom you observe the credibility of the witness. Do you think the witness is believable? What about the in-court identification?
   - If this was the only evidence presented by the prosecution, how many of you would vote guilty? not guilty? Convince each other to vote your way.
   - What other information would you want to have presented to help you decide the case?

10. **Conclusion:**

    This lesson has asked you to examine your own ability to remember events and the role of eyewitness testimony in court. What will you remember about this lesson?

JoEllen Ambrose is a lawyer and educator from Minnesota. She is a past recipient of the Isidore Starr Award for Excellence in Law-Related Education.

Want to learn more? Visit us at www.insightsmagazine.org.
The juvenile justice movement has achieved notable successes in recent years both at the judicial and legislative branches of government. There is still much more work to be done. The recognition that kids are different has animated much of this positive change. Still, too many juveniles remain in prison, confined to life without the possibility of parole (LWOP) sentences, languish in solitary confinement, face transfer too easily to adult court, and suffer punishment disproportionately based on race or ethnicity.

First, let’s examine the positive developments. The United States Supreme Court has recognized what groups like the American Psychological Association [see excerpt from the APA brief in *Graham v. Florida* (2010) in the accompanying sidebar on page 28] and the American Academy of Child Adolescent Psychiatry have been saying for years—juveniles are different from adults. Their brains are not as fully developed; they do not appreciate the gravity of their actions; they are more prone to make impulsive and risky decisions; they are not as culpable as adults; and most importantly they are more amenable to rehabilitative efforts.

**Positive Supreme Court Trend**

The United States Supreme Court has recognized . . . juveniles are different from adults. Their brains are not as fully developed; they do not appreciate the gravity of their actions; they are more prone to make impulsive and risky decisions; they are not as culpable as adults; and most importantly they are more amenable to rehabilitative efforts.

is evidence of irretrievably depraved character,” wrote Justice Anthony Kennedy for the majority. “From a moral standpoint it would be misguided to equate the failings of a minor with those of an adult, for a greater possibility exists that a minor’s character deficiencies will be reformed.”

Five years later the Supreme Court ruled in *Graham v. Florida* (2010) that it violates the Eighth Amendment to sentence a juvenile to life without the possibility of parole for a non-homicide offense. The juvenile in question—Terrance Jamar Graham—had committed robberies but did not kill anyone. His parents were addicted to crack cocaine when he was born and he suffered from severe attention deficit disorder as a youngster. Sadly, he made bad and costly choices to engage in criminal behavior.

However, Justice Kennedy once again emphasized the differences between juveniles and adults. “*Roper* established that because juveniles have lessened culpability they are less deserving of the most severe punishments,” he wrote. “A juvenile is not absolved of responsibility for his actions, but his transgression is not as morally reprehensible as that of an adult.”

The Court followed this opinion with its decision in the consolidated cases of *Miller v. Alabama* and *Jackson v. Hobbs* (2012). The Court ruled that juveniles convicted of homicide offenses cannot automatically receive a mandatory life without the possibility of parole sentence. In other words, the juvenile defendant must have the opportunity and the court must consider other possible sentences.

Once again, the Court built upon its previous decisions. “*Roper* and *Graham* establish that children are constitutionally different from adults for purposes of sentencing,” wrote Justice Elena Kagan for the majority. “*Roper* and *Graham* emphasized that the dis-
tinctive attributes of youth diminish the penological justifications for imposing the harshest sentences on juvenile offenders, even when they commit terrible crimes.”

Finally, in Montgomery v. Louisiana (2016), the Court ruled that its landmark decision in Miller v. Alabama (2012) was retroactive, meaning that it could be applied to individuals convicted as juveniles even decades earlier—such as 68-year-old Henry Montgomery who killed a deputy sheriff when he was only 17 years old. Once again writing for the majority, Justice Kennedy wrote that “Miller announced a substantive rule of constitutional law.” These series of Supreme Court victories for the juvenile justice movement in Roper, Graham, Miller, and Montgomery signaled a sea change. The Court fundamentally recognized that kids are different and should be treated differently by the criminal justice system.

Legislative Changes
In a 2012 Iowa Law Review article, “The Miller Revolution,” Cara H. Drinan referred to the above mentioned Supreme Court decisions as a “juvenile justice revolution.” The Court’s decisions have caused many states to pass laws that eliminate some of the more tough-on-crime, overly punitive approaches to juvenile offenders.

According to The Sentencing Project, 28 states and the District of Columbia have changed their laws concerning juveniles sentenced to life without parole. “Policy Brief: Juvenile Life Without Parole: An Overview.” Many states have eliminated the sentence of life without the possibility of parole for juvenile offenders. Others have amended their codes to specifically provide for the possibility of such offenders being paroled after a period of time, such as fifteen (15), twenty-five (25), or forty (40) years. Still other state laws mandate individualized sentencing hearings and prohibit the mandatory imposition of LWOP, as Miller instructed.

Thus, state laws enacted after the Supreme Court decisions generally give judges more discretion in sentencing—deciding each case on an individual basis, rather than issuing an automatic or mandatory punishment.

Need for More Changes
While there has been a juvenile justice revolution, problems persist and more work needs to be done. Too many juveniles with mandatory life sentences remain languishing in prison years after their crimes. Thirty (30) states still allow for mandatory life without the possibility of parole sentences.

Perhaps most tellingly, Henry Montgomery, now in his 70s, was denied parole by the Louisiana Board of Pardons and Committee on Parole. See Grace Toohey, “Board denies parole to man who served more than 50 years after killing deputy when he was juvenile,” The Advocate, Feb. 19, 2018. The Board’s decision was 2–1. The dissenting vote was cast by Alvin Roche, Jr. “In my opinion, Henry Montgomery will become a productive member of society, if allowed a second chance,” Roche said. Sadly, he didn’t get the chance.

But the problems in the system extend far beyond the sad tale of Henry Montgomery. Too many juveniles are subject to sexual abuse, physical abuse, and other brutal conditions of
Differences Between Juvenile and Adult Brains

Research in developmental psychology and neuroscience—including the research presented to the Court in *Simmons* and additional research conducted since *Simmons* was decided—confirms and strengthens the conclusion that juveniles, as a group, differ from adults in salient ways the Court identified. Juveniles—including older adolescents—are less able to restrain their impulses and exercise self-control; less capable than adults of considering alternative courses of action and maturely weighing risks and rewards; and less oriented to the future and thus less capable of apprehending the consequences of their often-impulsive actions. For all those reasons, even once their general cognitive abilities approximate those of adults, juveniles are less capable than adults of mature judgment, and more likely to engage in risky, even criminal behavior as a result of their immaturity. Research also demonstrates that “juveniles are vulnerable or susceptible to negative influences and outside pressures, including peer pressure, while at the same time they lack the freedom and autonomy that adults possess to escape such pressures. *Simmons*, 543 U.S. at 569.

Finally, because juveniles are still in the process of forming a coherent identity, adolescent crime often reflects the “signature”—and transient—“qualities of youth” itself…rather than an entrenched bad character. Research has documented that the vast majority of youthful offenders will desist from criminal behavior in adulthood. And the malleability of adolescence means that there is no reliable way to identify the minority who will not.

Consistently with these recognized developmental characteristics of adolescents, recent neuroscience research shows that adolescent brains are not yet fully developed in regions related to higher-order executive functions such as impulse control, planning ahead, and risk evaluation. That anatomical immaturity is consonant with juveniles’ demonstrated psychosocial (that is, social and emotional) immaturity.


confinement, such as solitary confinement. Solitary confinement causes extreme psychological harm and can lead incarcerated juveniles to commit suicide. A bill introduced in Tennessee cites a study by the Department of Justice that “sixty percent of young people who committed suicide in custody had a history of being held in isolation.” Bills in several states have been introduced to eliminate this practice.

Too many children are transferred to the adult system, chances of rehabilitation decrease and the likelihood of recidivism increases. Furthermore, it runs counter to the original ideal behind creating juvenile courts.

Finally, the pernicious problem of racial disparities continues to plague the juvenile justice system. African-American and Latino youth continue to receive more juvenile life sentences, the disproportionate share of transfers to adult courts, stiffer sentences, and ostensibly harsher treatment in general. As the California Alliance Youth & Community Justice writes in their study “Treat Kids as Kids”: “African-American and Latino youth are overrepresented at every stage of the juvenile justice system.” As long as that continues, it is hard to say that justice has been achieved.

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Hidden Brain
This NPR podcast explores the unconscious patterns that drive human behavior, the biases that shape choices, and the triggers that direct the course of relationships. While not exclusively law-focused, the episodes often address the intersections of psychology and brain science with law and policy.
https://www.npr.org/series/423302056/hidden-brain

American Academy of Psychiatry and the Law
This organization maintains an archive of significant U.S. Supreme Court decisions, publications, and a database of policies, related to a psychiatry and the law.
http://www.aapl.org/

Trial of Charles Guiteau
On July 2, 1881, Charles Guiteau shot and fatally wounded President James A. Garfield in the lobby of a Washington, DC train station. Guiteau proclaimed that he was a patriot, inspired by God to “remove” Garfield for the good of the nation. A lawyer himself, Guiteau participated in his own defense, vigorously presenting evidence of his own insanity. The famed Famous Trials website houses a bevy of primary sources related to the trial.
http://famous-trials.com/guiteau

American Justice: Our Obsession with Lie Detectors
Historian Ken Alder presents a program about the history of lie detection technology, its skeptics, and how the American legal system—and the American public—embraces it.

Brains on Trial
This video from the World Science Festival wonders: What if we could peer into a brain and see guilt or innocence? Brain scanning technology is trying to break its way into the courtroom, but can we—and should we—determine criminal fate based on high-tech images of the brain? A distinguished group of neuroscientists and legal experts debate how and if neuroscience should inform our laws and how we treat criminals.
https://youtu.be/Ra2niqQhR8M

Research Network on Law & Neuroscience
A major research initiative supported by the John D. and Catherine T. MacArthur Foundation addresses a focused set of closely-related problems at the intersection of neuroscience and criminal justice: 1) investigating law-relevant mental states of, and decision-making processes in, defendants, witnesses, jurors, and judges; 2) investigating in adolescents the relationship between brain development and cognitive capacities; and 3) assessing how best to draw inferences about individuals from group-based neuroscientific data. The site features an archive of publications, statistics, and research and policy news.
http://www.lawneuro.org/

“Incriminating Thoughts,” by Nita Farahany
How might advances in neuroscience contribute to legal definitions of speech, especially when it concerns self-incrimination in courts?
https://scholarship.law.duke.edu/faculty_scholarship/2651/
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