

PERSUASION FOR LAWYERS & HOW IT HAS CHANGED

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PERSUASION FOR LAWYERS & HOW IT HAS CHANGED

The topic of Persuasion is so bound in history (Aristotle 384 BC to 322 BC and he learned from others before him), and so vast in application (philosophy, psychology, management, leadership, marketing, sales), and so many other fields of endeavor and analysis that the practicing trial bar's attention to these concepts are decades behind. By far Plaintiff Personal Injury Lawyers are generations ahead of other branches of trial lawyers in attempting to address this vital subject for every trial lawyer.

Because of the vastness of the subject, and the universal propensity of trial lawyers, wherever geographically located or the type of trial law practiced, to analyze each trial skill by analyzing persuasion from the point of view of Opening, Direct-Examination, Cross-Examination, Rebuttal, and Closing Argument there is a dearth of coherent analysis.

For domestic relations lawyers the gaps in persuasion techniques may well be more gaps than attempts to fill in the gaps. The reality is that, in the majority of states, most of the issues contained in a domestic relations trial are addressed to a judge without a jury acting as the trier of fact, complicate persuasion analysis even further.

These presentations will not attempt to identify, analyze, and provide a 'how to' as to each technique. Lists of the newest advances as referenced in academic articles lists of traditional authors in the subject are attached. Also attached are listed notable current prolific authors, and rather select techniques are targeted. They are targeted as applied in the context of a trial skill. For instance, the persuasion technique and skill of effective Trilogies can be analyzed as it is applied during one trial in Opening, Direct-Examination, Cross-Examination, and Closing Argument for a cohesive, consistent, and comprehensive application of a trilogy oratorical device and technique. The presentations will not analyze written persuasion, as so much of trial is oral in nature.

In the last 50 years, more and more trial procedure and court customs have evolved from oral presentations into written presentations. Fifty (50) years ago, in jury trials and in bench trials, there was never a suggestion, let alone an order and custom that a closing argument be rendered in writing as opposed to verbal. Now it is more likely to be in writing. In domestic relations non-jury trials, it is commonplace. Since domestic relations trials make up a large percentage of the overall trial docket, more and more judges prefer the written form. The written form is so different from the oral that written persuasion has in many ways become its own subject matter. Of course, there is an overlap, but written persuasion is not our focus.

This presentation started out as the latest news, studies, and science impacting the subject of persuasion. It has been required to be expanded to put the most recent discoveries in context from the use of previously used techniques, and to modify those previous efforts to become more precise by those modifications. We have decided to expand the video presentations to three (3) or four (4) hours comprised of hour-long segments or editions. In working on the latest discoveries, it brought exposure to the lack of legal offerings or training. When I first started practicing trial work, there were willing mentors of two (2) types. I was not shy to ask more experienced lawyers for advice.

PERSUASION FOR LAWYERS & HOW IT HAS CHANGED

There was almost always a price to pay for the time those lawyers gave me and many of the prices included 'tough love'. The other type may have been even better guides and instructors, but I did not ask any of those for help. In some instances, I did not even know them. They were just trial lawyers who decided to explain to me how poorly I had performed and supplied practical solutions.

The unsolicited advice most often started out as: 'I saw you struggling in court today, so let me tell you...'. They then would teach me in the various deficiencies I had. Most of the time, their rather harsh criticism was of immense help. I did have to get over my bent feelings, but there were lessons there. I do not see that happening now. Lawyers are not trying to make each other better anymore. At least one of the videos will be aimed at basic core skills to be more persuasive and less distracting to their listeners. Stand by for that series of videos.

PRIMACY AND RECENCY

Trial lawyers and others have been applying these principles for hundreds of years. Primacy provides that the first impression made is the most important impression to be made. Lead with important information, important subjects, important concepts. Recency provides that the last impression is the most important impression to be made.

Both concepts begun to be written about in the 1950s and 1960s. Lawyers had been fighting to be first heard or last heard for hundreds of years before that. Trial lawyers have instinctively understood both concepts before anything was put in writing. Trial lawyers and judges had invested these principles within the rules of law sanctifying their significance.

Times have evolved and the significance of these principles have changed. Primacy has taken a more prominent role in persuasion. People demand quick answers and immediate solutions. Delay does not now lead to anticipation in discovering the answer or solution. It leads to impatience, boredom, and apathy. Recency has lessened in significance, and this reduction has accelerated by many influences, including, the internet, limited word count responses, tick tock, and speed of communication. Rely on Primacy. Do not delay for Recency. In July 2026, the University of Illinois published a study that persuasively suggests that the brain begins making decisions much earlier than previously thought. This new study points to dynamic brain function.

Previously, primary functional areas do more than pass forward information to other parts of the brain. They influence the information that moved forward. For trial lawyers, this study explains why juries and judges have not been waiting for Recency to form verdicts and the reasoning supporting them. These type studies are accelerating the science that trial lawyers have to apply to trials. Driven by concentration on Artificial Intelligence development means that more and more science will be available to us on how best to construct persuasive arguments. Literally we are witnessing dramatic and accelerating evolution in knowledge on what works best for our brains to accept a position, and just as importantly the science behind that evolution.

PERSUASION FOR LAWYERS & HOW IT HAS CHANGED

COMPARISON STUDIES OF HOW BEST TO PRESENT FACTS INTENDED TO PERSUADE WITH NEW TECHNOLOGY

Leading the wave of new available technology to study how the brain does its work is the functional MRI or fMRI. Instead of illustrating what the shape of the brain will appear, fMRI images illustrate blood flow through specific regions of the brain and even the degree of oxygenation of the blood flow in specific areas of the brain that control a specific brain function.

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Compare a robust presentation of raw data, facts, figures, bullet points, charts, and key words. That presentation only lights up brain function related to language. When a narrative story is heard by the brain, multiple brain space fires or light up including movement, emotion, sensory experience and a different memory path. Trial lawyers have been attracted to storytelling as a platform of explaining their cases persuasively over the decades. Trial lawyers, being who we are, have debated the effectiveness of this platform over the decades. Most often we give citation to the clergy, to psychological studies, marketing models and now a whole organization and leadership philosophy that urges that use for many years. It is not enough to say that multiple areas of the brain light or fire up with oxygenated blood flow that alerts us to that particular region of the brain working at a higher rate.

At least four different increases are noted. There is alignment in the brain of the storyteller and the listener. They are in the same regions of the brain. They light or fire in the same patterns, and they do so at the same time. For those of us who have embraced this model or platform in the past there is objective science to back up our personal experiences that have led to our reliance on the story telling method.

To be clear, real stories are more effective to use than made up or fictional stories. Real characters, with character flaws and vulnerabilities. The 'real' part of the story can be drawn from incident reports. That is, from real factual events. But they can also be constructed from what was always thought of as 'dry' or 'boring but necessary' evidence from typical domestic relations type trials. It is not the story that the brain accepts, but the form of the story that does the encoding to the brain. The brain does not listen to the story as it does when 'listening' to facts, and figures such as bullet points.

When told in the form of a story, the brain experiences the story. Physiologically the listener's multiple various brain regions light up, in the same regions as the storyteller's, in the same pattern, and at the same times shows that the listener's brain cannot differentiate between an actual factual event and the story.

Stories do not have to be long. In Opening and Closing, they can be a short paragraph. In examinations, four (4) to eight (8) questions. The more often we use our story form the more we will improve our ability to trigger regions of our brain. This in turn, triggers regions of our listener's brain. In Stanford and Princeton studies, and in

PERSUASION FOR LAWYERS & HOW IT HAS CHANGED

other respected educational institutions, it is shown to be as much as twenty-two (22) times more effective compared with lists of facts. We will be better able to apply the story form to all parts of the trial and skillsets involved.

We know that applying to sensory regions of the brain will cause those same regions in the listener's brain to light or fire up. Neurons designated as mirror neurons permit the listener's brain to react to a story physiologically in the same way, and experience it in the same way as if the listener's body did the activity

BE YOURSELF

Over the space of my career, I have struggled with advice to just be myself when addressing the court or jury. First, I did not know how to thoughtfully be myself without losing my spontaneous self. Books were and are written on that 'paradox'. Exercises taught to integrate those areas which were assumed that they were not contained within each other. Then, came the realization that there were numerous 'myselfs' contained within that same self. Which one to show to the factfinder?

Be yourself, but our most thoughtful, patient, respectful self. Just as I am 'more careful' when in a church, that is the 'self' that works best in court and does not lose the more spontaneous self. In the story telling technique the listener's brain readily accepts flaws. Vulnerabilities are accepted and embraced.

GOALS IN A TRIAL

Early in a trial lawyer's career, when asked what the general goal is, most articulate trial lawyers would express: "To have judges and juries to make decisions in our favor." Upon deeper reflection, and experience, the answer evolves: "To make the factfinder's decision to be an easy decision in our favor." Presenting the most persuasive arguments yields that result. We must strive to use all techniques possible to make decisions by the factfinder easily made in our favor.

WORD SELECTION

Thoughtful word selection heavily contributes to a meaningful story or series of stories in a trial. Part of the process means avoiding danger areas that too often can have the opposite result. We now know that word selection physiologically causes our listener's brain to respond in a way that cannot be faked or avoided. Their brain experiences the event. So, too, when we enter a danger area, then we risk that dangerous result.

As an example, when selecting words to advance our story, concentrate on verbs in contrast to adverbs and adjectives. Adverbs and adjectives in preparation come to mind easier and faster but are too easily reversed by an opponent to undermine our intended stories.

PERSUASION FOR LAWYERS & HOW IT HAS CHANGED

In this selection process, we must sound confident in our delivery. Preparation builds that confidence. Reliance on personality, especially spontaneous personality, cannot approach the confidence status of preparation.

Persuasion is not the same as eloquence. There must be deeper substance and content than it sounds pretty. That does not come close to neuron coupling.

ARISTOTLE'S LESSONS HAVE NOT DIMINISHED

He taught the cornerstone of persuasion were:

- (1) Logos or logic
- (2) Pathos or emotional drama
- (3) Ethos or personal credibility

They remain that important. However, in our courtrooms, Ethos is most important. A trial lawyer must always be above reproach. Their personal integrity is the most important commodity that they have.

Mythos (underlying system of beliefs and cultural values) represents a building block of persuasion. It takes from each of Aristotle's teaching.

ALWAYS CONNECT TO DECISION-MAKERS

One of the biggest flaws in present day persuasion is that the speaker is not directing or connecting their arguments to the decision-maker. This becomes evident when the speaker is talking about how the argument connects to him or her rather than to the listener. Another indicator is when the speaker does not present a realistic persuasion goal. That unrealistic goal cannot persuade a factfinder because the goal is not a viable alternative.

Likewise contrasting our narrative or story against our opponent's or our style to an objectionable opponent's style, or contrasting even our tone, persuades our audience.

PERSUASION IS ALL ENCOMPASSING

Persuasion in the courtroom involves so many parts of who we are. Body, mind, and voice are all involved. Add in what not to do and what is not permitted our plates are full. But because the subject is so vast and encompasses so many fields and so much history, we must study it more not less.

AUTHORS AND RESOURCES

Part of the purpose of this written handout is to share the names of researchers, experts in other disciplines, and authors on what is happening now in the fields at a really rapid rate. So much of the most recent writings about persuasion are being chronicled in short articles published in specialty journals or just on the internet. So, I will list authors

PERSUASION FOR LAWYERS & HOW IT HAS CHANGED

who enlightened me. There are many and they produce a wealth of material. There is very little published by lawyers; so, we have to apply what they teach us to what we do in the courtroom.

First, we have to understand and make sure we understand what they are teaching us. The science of it can get deep in a hurry. Then, we have to work through what we have learned and learn how best to apply it to our cases. Part of that application is what this series of content is all about. What I have evolved as my method after trying other education models that did not work as well and resulted in a pile of books that I had to donate to the local library is to monthly, weekly or whenever search the internet under an author's name. There is a flag type automatic search by names that alerts me to certain names too.

Author: Carol A. Oliver, *The Social Brain and the Neuroscience of Storytelling* (2023)

Author: Chuck Dinerstein, MD, MBA, *How Stories Sculpt the Brain: What New Research Says About Memory and Media* (2025)

Author: Harry Cloke, *The Neuroscience of Storytelling: Why the Brain Learns More from Stories – Growth Engineering* (2026)

Author: Imogene Short, *The Narratives Edge and The Neuroscience of Storytelling: Why Stories Make Us Remember*

NOTE: I read everything I could find that she has written. She writes in a way that this trial law immediately understands.

Author: U. Hasson, *Science Communication Lab and Storytelling and Memories: How the Act of Storytelling Shapes Our Minds* (2021)

NOTE: I have been reading his work for more than a decade.

Author: Paul Zak, *The Future of Storytelling* (2021)

Author Phillip N. Meyer, *Storytelling for Lawyers* (2014)

Oscar Forrester, *The Very Big Brain*

Ontario Brain Institute, www.braininstitute.ca

NILES, www.neuroleadership.com/niles

Science Journalist Allison Parshall, www.allisonparshall.com

Professor Christopher A. Baldassano, Dynamic Perception and Memory Lab

www.dpmlab.org

Professors Alex G. Armstong and Yurii Vlasov, *Neural Correlates of Perceptual Decision-Making in the Primary Somatosensory Cortex* (2026)

PERSUASION FOR LAWYERS & HOW IT HAS CHANGED

Not as current, but long tradition:

Robert Cauldini

Jefferson Fisher

Robert A. Burton

Doug Stevenson

Malcom Gladwell

Clotaire Rapaille

Robert M. Persig

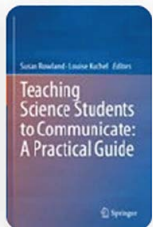
Jonah Lehrer (especially "How We Decide")

Additional research: 31 Common Rhetorical Devices. Merriam - Webster

The Social Brain and the Neuroscience of Storytelling

| Chapter | First Online: 26 April 2023

| pp 31–38 | [Cite this chapter](#)



Teaching Science Students to Communicate: A Practical Guide

[Carol A. Oliver](#) 

Abstract

Why is storytelling so powerful? Why do we remember stories so easily? Research suggests that our brains are socially and emotionally hard-wired to absorb stories. Stories help us learn and remember because they generate emotion and empathy. We know that storytelling is a useful and persuasive tool. Now, advances in neuroscience are helping us understand why our brains react differently to stories than they do to non-storied sets of information. As we teach and learn to communicate science, it is important to find stories that make the content alive, emotive, and exciting.

How Stories Sculpt the Brain: What New Research Says About Memory and Media



By Chuck Dinerstein, MD, MBA — Oct 20, 2025

In a world saturated with stories—from ancient myths to TikTok clips—narratives knit together emotion, memory, and meaning. A new study in the Journal of Neuroscience suggests that how a story is told—through vivid sensory detail or thoughtful reflection—changes the way it's encoded in the brain and remembered. Stories don't just entertain; they sculpt memory pathways, engaging different neural networks depending on whether we focus on what we saw or what we felt.

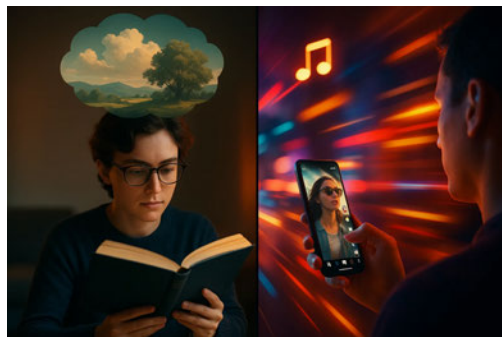


Image: ACSH

Humans are storytellers. In an age when social media has exponentially amplified storytelling, stories provide the common narrative for civilization's cultures, sharing in our evolution as much as genetics and

niche. Stories renew and refresh memories. A new study in the Journal of Neuroscience investigates just how a story's content shifts how it is remembered.

The Science of Stories

Memories are layered reconstructions: they include a story's main events, its overall structure, and peripheral details that enrich it with color and context.

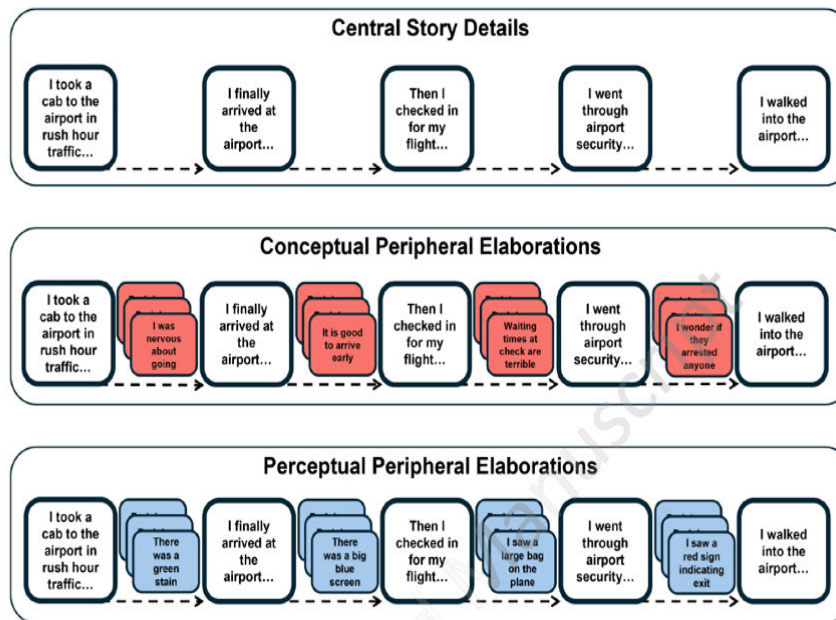
When memories are formed, the hippocampus, a brain structure critical for integrating different types of information into a single memory trace, flexibly engages with other brain regions, particularly those within the default mode network (DMN). The DMN is an extensive, interconnected network of brain regions that is particularly active when an individual is ***not focused*** on the external world, when we meditate, rest, or ponder aimlessly. Prior studies have indicated that some connections between the hippocampus and DMN are associated with emotional and evaluative aspects of memory, the conceptual details, the analytics, and emotional responses. Other portions of the hippocampal network appear more involved with perceptual elements of memory, e.g., the sights and sounds.

The study explored whether differences between conceptual and perceptual storytelling arise during memory formation or only later during recall. To test this, researchers crafted short narratives about everyday events that shared the same core details but differed in their added context—some emphasizing sensory detail, others reflective meaning. Using fMRI brain scans, they observed distinct hippocampal connectivity patterns for the two story types, suggesting that the kind of detail surrounding an event changes how the brain encodes and later retrieves it. To see how these differences played out in practice, the team built stories designed to tease apart concept and perception.

Experimenting with Narrative

The researchers created three stories based on everyday events: "Going to a Restaurant," "Taking a Flight," and "Getting Groceries." Each story had 14 consistent details forming the narrative, but differed in the 42 "elaborative details."

- **Conceptual Details** - those that describe analytic or emotional responses tied to a central detail. For example, in the restaurant narrative, a central detail, "The host brought us to our table on the patio," a conceptual detail would be:



Source: Hippocampal-cortical networks predict conceptual versus perceptually guided narrative memory

"The patio was actually up on the rooftop of the restaurant, which was ***a pleasant surprise***". [emphasis added]

- **Perceptual Details** - describe something experienced with the **senses** (sight, sound, taste, touch, smell). Statements were designed to describe associated objects, people, and sights in the external environment. Using the previously mentioned central detail, the perceptual detail would be "I **noticed** the wooden arm of the chair was **chipped** in a few spots". [emphasis added]

During fMRI scanning, thirty-five adults listened to full versions of these stories, which embedded the identical central events within either conceptual or sensory details. Afterward, participants rehearsed the stories mentally, rated their experience, and later recalled the narratives aloud. Those memories of the shared central details, the story's narrative, were then compared to the brain connectivity patterns.

What the Brain Remembers

The results showed clear linguistic and experiential differences. Stories rich in sensory imagery used more concrete language, while conceptual ones featured greater emotional and introspective expression. Both story types were recalled with similar accuracy, but participants described conceptual stories as easier to rehearse, more enjoyable, and recalled them with

greater confidence. These behavioral differences mirrored distinct neural pathways, revealing how the brain “tunes” itself to different storytelling modes

Different Story, Different Pathways

When people encoded conceptually rich stories—those emphasizing thoughts and emotions—the hippocampus connected more strongly with the brain’s default mode network, which integrates personal meaning. In contrast, sensory-heavy stories activated regions that process sights and sounds. Both routes supported recall of the main events, showing that while the brain can reach the same destination, it takes different paths depending on whether a story speaks to feeling or perception. It seems memory is not just about storage but about **interpretation**.

This neural flexibility echoes ideas long explored in media theory—particularly Marshall McLuhan’s notion of “hot” and “cool” communication.

Memory’s Temperature

While Marshall McLuhan is best known for “the medium is the message,” he had many other important insights into media. For our purposes, hot and cold mediums.

Gutenberg and his cohort replaced a millennium of oral storytelling with text or print. For McLuhan, text is a “**cool medium**”—with few sensory cues, readers must imagine the sights, sounds, and emotions, effectively *co-creating* the story. Based on this research, this reflective engagement strengthens meaning-based networks in the brain, producing memories that emphasize **emotional gist** and personal insight rather than fine perceptual detail.

Today’s oral storytelling, podcasts, audio books, and talk radio sit midway between print and video. While still a cool medium, it invites participation, as listeners visualize what they hear, filling in missing details while also absorbing and entraining to words’ rhythms and affective cues. This combination should foster **hybrid** memories, blending conceptual understanding with auditory-perceptual traces.

Visual storytelling exemplifies McLuhan's "hot medium" by delivering high-definition sensory content with little for the audience to complete. The brain needn't imagine, only absorb. These experiences create vivid, concrete memories that feel immediate and emotionally charged but are often less integrated into the viewer's personal meaning frameworks over time.

This research may offer a neuroscientific context for McLuhan's idea that a medium's "temperature" shapes memory. Each form of storytelling activates a different balance of neural networks, each leaving a distinct imprint on how we remember what we experience.

A recent Pew [survey](#) found that one in five Americans now get their news from TikTok—a distinctly "hot," visual medium. Could these findings help explain why social media stories feel so immediate, yet sometimes fleeting? Future research may reveal whether our evolving media diet harmonizes—or clashes—with the way our brains are built to remember.

Why Stories Stay With Us

Whether a story is cool and conceptual, inviting our imagination to fill in the gaps, or hot and sensory, demanding our attention to detail, our brains adapt by forging distinct routes to remembrance. In a digital world where visual storytelling dominates, understanding how stories mold memory could

illuminate why some stories linger as emotional truths while others fade as fleeting impressions. The science of storytelling reminds us that how we share shapes not only what we remember, but who we may become.

Source: Hippocampal-cortical networks predict conceptual versus perceptually guided narrative memory Journal of Neuroscience DOI: [10.1523/jneurosci.1936-24.2025](https://doi.org/10.1523/jneurosci.1936-24.2025)

Tags: [neuroscience of storytelling](#) [brain memory pathways](#) [default mode network](#) [sensory vs conceptual memory](#) [Marshall McLuhan](#) [digital media and memory](#) [TikTok storytelling](#) [hippocampal connectivity](#)

Category: Other Science News

Harry Cloke

July 13, 2026

Neuroscience

12 min read



Storytelling has always felt powerful. But until recently, nobody could explain why, or prove that it produced measurably better learning. Then a Princeton neuroscientist put a storyteller inside a brain scanner.

In 2010, a woman lay inside an fMRI scanner at Princeton University and told an unrehearsed story about her school prom. Neuroscientists recorded her brain activity, then played the recording to listeners in the same scanner.

What they found was remarkable. The listeners' brains mirrored the speaker's. The same regions activated in the same patterns, delayed by just a few seconds. In some areas, the listeners' brains even got ahead of the speaker, anticipating what was coming next.

This points to a conclusion the training industry has been slow to act on: narrative isn't a nice-to-have in learning design. It's the delivery mechanism the brain is built to receive. That's what this article will explore.

So sit back and let the science tell you a story.

Why Do Stories Help Us Learn?

Storytelling is the oldest [learning technology](#) we have. Long before classrooms, textbooks, or [eLearning modules](#), humans transferred knowledge through narrative. Oral traditions, parables, and myths encoded cultural values across generations.

For example, Homer memorised over 15,000 lines of the Iliad and transmitted them across the ancient Greek world. The story survived not because it was written down, but because it was memorable.

The instinct in L&D has been to treat narrative as a nice-to-have. Something to "make content more engaging" rather than a fundamental mechanism for how the brain processes, encodes, and [retains information](#). As a result, storytelling often gets filed alongside [icebreakers](#) and [motivational quotes](#): pleasant but quite peripheral.

The neuroscience says otherwise. In recent decades, researchers have begun mapping exactly what happens inside the brain when someone tells or hears a story. And the findings suggest that narrative isn't peripheral to learning at all.

In fact, it may be one of the most powerful encoding strategies available. It's more effective than facts, more durable than data, and harder to forget than almost any other format.



conversation.

A [2025 replication](#) found the figure may be closer to **85%**. We don't default to facts and bullet points when we talk to each other. We default to stories.

What is Neural Coupling?

Neural coupling is the synchronisation of brain activity between two or more people during communication. When a speaker tells a story and a listener understands it, their brains don't just process the information independently. They align, activating the same regions, in the same patterns, at roughly the same time.

That might sound like science fiction, but it's science fact.

[Hasson's original 2010 study](#) was the first to demonstrate this directly. Using fMRI, his team recorded a speaker telling a real-life story, then played the recording to listeners and compared the brain activity.

The coupling was widespread, spanning language regions, areas involved in spatial processing, and higher-level regions associated with understanding meaning and context. Three findings from the study stand out.

- The listener's brain mirrored the speaker's with a short delay.
- In some regions, the listener's brain anticipated the speaker.
- And coupling vanished completely when communication failed.

Here's an example of that failure. When the story was told in Russian to non-Russian speakers, the synchronisation disappeared.



To help picture how this works, think of a rowing crew finding their rhythm. Nobody announces the pace. The crew adjusts, stroke by stroke, until every oar hits the water at the same moment. The result is speed and efficiency that no single rower could muster.

Neural coupling is the cognitive equivalent. Two brains finding a shared rhythm that neither consciously controls.

The Role of Mirror Neurons in Storytelling

Part of the explanation may lie in the [mirror neuron system](#). Mirror neurons fire both when we perform an action and when we observe someone else performing it.

During storytelling, they go further: when a character runs, the listener's motor cortex activates. When a character eats, sensory regions respond.

The brain doesn't just process the story. It simulates it by running the narrative's events as though the listener were experiencing them firsthand.

This embodied simulation is one of the mechanisms that makes narrative so much more memorable than abstract instruction.

How Does Storytelling Affect The Brain Chemically?

Neural coupling explains the structural synchronisation. But [Paul Zak's research](#) at Claremont Graduate University explains the chemical response.

Zak's lab discovered that character-driven stories with [emotional content](#) trigger the release of two specific neurochemicals. The first is [cortisol](#), which

The second is oxytocin, produced during moments of empathy and emotional connection with a character. Oxytocin enhances our ability to understand and share the feelings of others. Zak even found that the amount of oxytocin released by a story predicted how willing people were to help others afterwards.

This is a potent combination. Cortisol holds attention. Oxytocin builds empathy. Together, they create conditions under which information is encoded more deeply and recalled more durably.

As Zak puts it, the result is a “better understanding of the key points a speaker wishes to make” and “better recall of these points weeks later”.

Notably, stories that follow a clear dramatic arc, where a character faces a challenge, struggles, and ultimately resolves it, produce this neurochemical sequence most reliably. It’s not a coincidence that this is the structure behind virtually every compelling narrative in human history.

The brain is wired to respond to it.

What is Narrative Transportation?

Neural coupling describes what happens between brains. Narrative transportation describes what happens within one.

The term was coined by psychologists [Melanie Green and Timothy Brock in 2000](#). They defined it as a state in which a person becomes so absorbed in a story that they are mentally “transported” into the narrative world. This amounts to a combination of:

- Focused attention
- Vivid mental imagery

world drops away. You stop noticing your surroundings. Time distorts. You're no longer processing the story. You're inside it.

Green and Brock's key finding wasn't just that this is an enjoyable experience. It can actually change what people believe. Individuals who are more deeply transported in a narrative are more likely to adopt the beliefs, attitudes, and behaviours implied by the story, and they generalise those lessons to real-life situations.

Two subsequent meta-analyses confirmed this across health, consumer, and social contexts ([Van Laer et al., 2014](#); [Braddock & Dillard, 2016](#)).

For [training design](#), the implications are clear. A well-constructed scenario doesn't just illustrate a [compliance procedure](#) or sales technique. It transports the learner into the situation and encodes the desired behaviour [through experience](#) rather than instruction.

The learner doesn't just understand what to do. They've already felt what it's like to do it.



What Does the Latest Research Say About Neural Coupling?

The foundational studies established that storytelling synchronises brains and changes belief. The latest research answers a more practical question: does any of this actually improve learning?

1. It Predicts How Much Students Learn

In 2023, [Suzanne Dikker and her colleagues](#) studied brain-to-brain synchrony in a real classroom. Using portable EEG, they measured the neural alignment between students and their teacher during lessons.



The finding: students whose brainwaves were more in sync with their teacher and peers retained more of the information they were taught. As [Dikker explains](#), "if your brain can predict what the teacher is going to say next, you are ultimately learning better."

2. It Starts Earlier Than We Thought

[Piazza et al. \(2019\)](#) found that infant and adult brains synchronise during play, particularly in regions involved with high-level



The learner wasn't passively receiving. They were actively guiding the interaction.

3. It Works At Scale



[Chang, Nastase, and Hasson \(2024\)](#) found that during naturalistic storytelling, a speaker doesn't just sync with one listener. They "herd" an entire audience's brains into convergence over time.

The more effective the storytelling, the tighter the alignment across multiple listeners simultaneously. A well-told story in a webinar, a [video module](#), or a live workshop can synchronise every brain in the room.

4. It Even Works Online



[Azhari et al. \(2025\)](#) measured neural synchrony between university students during a Zoom seminar using fNIRS. Higher inter-brain synchrony in the prefrontal cortex predicted both better relational satisfaction and better task performance.

In other words, neural coupling isn't limited to face-to-face. It happens in digital learning environments too, though [Schwartz et al. \(2024\)](#) found that face-to-face communication produces significantly stronger synchrony than text or video, suggesting richer channels still have an advantage.

5. It Goes Deeper Than Language



[Zada, Nastase, Speer et al. \(2026\)](#) used fMRI hyperscanning to simultaneously record two people's brains during real-time conversations for the first time. They found that speaker-listener coupling extends beyond the language network into regions associated with social cognition.

Stories vs Facts: What the Brain Remembers

You may have seen the claim that we're **22** times more likely to remember a story than a fact, often attributed to cognitive psychologist Jerome Bruner. Unfortunately, no primary source for that figure has ever been found.

But like the [best myths](#), it persists because it feels true. What's more, the research that does exist supports the direction, if not the number.

For example, [Chip Heath](#), a Stanford professor, ran a classroom exercise in which students delivered one-minute persuasions using statistics and stories. Afterwards, **63%** of students remembered the stories. Just **5%** remembered a statistic.

How to Use Storytelling in Training Design

The research makes a compelling case. But for [L&D professionals](#), the practical question is: how do you actually build narrative into training without turning every module into a creative writing exercise?

The answer is that effective storytelling in training doesn't mean writing fiction. It means structuring information so the brain processes it as a story rather than as a simple ([and forgettable](#)) list of facts.

- **Lead With a Character:** Instead of "here are the five steps of our complaints procedure," try "Sarah is a customer service manager. A customer just escalated a complaint to her line manager for the third time this month. Here's what she does next." This gives the learner's brain someone to follow and a reason to care about the outcome.
- **Use a Dramatic Arc:** Tension, struggle, resolution. This isn't just a formula for Hollywood screenwriting. It's the neurochemical sequence

- **Scenarios Over Slide Decks:** [Scenario-based learning](#) is narrative transportation applied to training. The learner is placed inside a situation, forced to make decisions, and shown the consequences. The desired behaviour is then encoded through simulated experience rather than instruction.
- **Make Your Learner The Protagonist:** The most powerful training narratives are the ones where the learner isn't observing a character but playing one. Think branching scenarios, role-based simulations, and [gamified challenges](#). These all place the learner at the centre of the story.
- **Use Real Stories:** [Case studies](#), customer scenarios, incident reports, and success stories from within the business carry an authenticity that fictional examples simply can't match. They also trigger stronger neural coupling because the learner will already recognise the context, the people, and the stakes.

For a fuller practical guide, see our article on [narrative in online learning](#).

The Line Between Storytelling and Seductive Details

There's an important distinction to draw here, and it connects directly to the [seductive details effect](#).

A story that carries the [learning objective](#) is narrative. A story that entertains but has nothing to do with the learning objective is a seductive detail. Both trigger neural coupling. Both activate oxytocin and cortisol. But only one produces real learning.

The test is as follows. Ask yourself:

- Is this interesting?

narrative in service of the objective. An opening anecdote about a famous hack that has nothing to do with the procedure being taught is a distracting aside.

Remember, the story isn't the point. What the story encodes is the point.

Final Words

Stories aren't just decorative. They're a delivery mechanism the brain is built to receive.

When a speaker tells a story well, the listener's brain synchronises with theirs. Meanwhile, narrative transportation lowers the listener's defences, allowing the learning to land before their critical filter can activate.

No bullet-pointed slide deck does any of this. Sorry. The research is clear. The question for L&D professionals isn't whether to use storytelling in training. It's whether you can afford not to.

Thanks for reading. If you've enjoyed this content, please [connect with me here](#) or [find more articles here](#).

The [Impact Suite](#) is built for narrative-driven learning. Book a demo now to see storytelling in action, or download our [Science of Learner Engagement](#) guidebook to go deeper into the research.



The neuroscience of storytelling: why stories make us remember

How the brain processes stories vs. facts (and why that matters)



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Think about the last time you sat through a presentation packed with facts, figures, and bullet points. How much of it do you actually remember? Now, think about a time someone told you a great story—one that made you feel something. Chances are, that story has stuck with you.

That's because our brains don't just *listen* to stories, they *experience* them.

Researchers at Princeton University discovered that when someone tells a story, a listener's brain mirrors the storyteller's brain activity. It's called *neural coupling*, and it means that when you describe a moment of tension or excitement, your audience's brain lights up as if they were experiencing it themselves.

Facts, on the other hand, don't have the same effect.

When we hear raw data, only the language-processing parts of our brain activate. But when we hear a story, multiple areas fire up—including those linked to movement, emotion, and sensory experiences. That's why we forget statistics but remember stories.

The story vs. stats experiment

Dr. Jerome Bruner, a cognitive psychologist, found that people are 22 times more likely to remember a fact when it's wrapped in a story.

A study at Stanford put this to the test. Students were asked to give a one-minute persuasive speech, with some using statistics and others telling a story. When asked to recall the content later, only 5% remembered the stats—but 63% remembered stories.

In real life, this plays out all the time. Think of charity appeals. A statistic like “Over 800 million people suffer from hunger” is powerful—but a personal story about one child struggling to find food is far more likely to make people donate.

How to make your story unforgettable

If you want people to remember your message—whether in a meeting, a presentation, or a conversation—there are a few storytelling techniques that make a big difference.

1. Use vivid sensory details

Your brain responds to sensory language as if experiencing the event firsthand. The more specific your descriptions, the more the brain engages. Sensory details help people *see, hear, and feel* what you’re saying, making it stick.

Try this: Next time you’re sharing an experience, don’t just describe what happened—bring it to life. Instead of saying, “*It was a tough decision,*” say, “*My heart pounded. I stared at the contract, knowing this choice would change everything.*”

By adding sensory details—what you saw, heard, or felt—you create a mental picture that makes your story more engaging and memorable.

2. Create an emotional hook

Neuroscientist Paul Zak found that when we hear emotionally charged stories, our brain releases **oxytocin**, the hormone that builds trust and connection. If people

something, they're far more likely to remember and act on what you say.

Try this: Instead of starting a presentation with facts, open with a story that triggers emotion. Maybe it's a personal challenge you overcame or a moment that shaped your thinking. The goal is to make your audience care *before* you ask them to listen.

3. Use the 'Story Gap' to build curiosity

The human brain loves unresolved stories. If you introduce an element of suspense or an unanswered question, people will stay engaged until they get the resolution.

4. Tie it back to the audience

Stories become powerful when people see

If you want to be remembered, tell a story.

Whether you're leading a team, pitching an idea, or trying to make an impact, facts alone won't cut it. People might



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Why? Because storytelling engages the brain in three powerful ways:

1. Neural coupling

Storytelling synchronises the brain activity of listener and speaker, creating a shared experience.

2. Sensory activation

Descriptions like "the smell of fresh coffee" light up the brain's sensory areas, making the experience vivid and real.

3. Emotional engagement

Stories trigger the release of oxytocin, the trust hormone, deepening connection and resonance.

Storytelling isn't just an art—it's rooted in science.

If you want your message to be unforgettable, craft a story that taps into the senses and emotions. That's how you make it stick.

#storytelling #leadership #communication

[Source: Made to Stick by Chip & Dan Heath]

“Stories are 22x
more memorable
than facts.”