

THE ENGAGEMENT FACTOR

The Critical Variable in Prevention and Outreach

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**“ For every health and safety
advocate who wonders if
their outreach matters, it does. ”**



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INTRODUCTION

When No One Is Watching

Think about the last health or safety decision you made when no one was watching.

Maybe it was choosing not to text while driving, even though your phone buzzed with a message you wanted to read. Maybe it was deciding to call a rideshare instead of driving after a few drinks at dinner. Maybe it was buckling your seatbelt for a trip around the block, or taking your medication even though you felt fine, or choosing the stairs instead of the elevator.

Whatever it was, ask yourself: What influenced that decision?

Was it a law? The law itself wasn't in the room with you. But perhaps your awareness of legal consequences was: your internalized understanding that getting caught means penalties, embarrassment, a record. Was it fear of a crash? The crash hadn't happened, but your internalized sense of what a crash means: injury, death, devastating a family, might have been present. Was it a device or an officer? Probably not physically. But your awareness of checkpoints, your memory of news stories, your sense of risk, all that lives inside you.

Whatever influenced your decision, it was something internal. Something you carried with you into that moment. That something is internalized judgment.

This book is about engagement: a critical factor in how well prevention efforts achieve their intended outcomes. It's about why creating engagement matters: not as a nice-to-have add-on, but as the essential first step in building the internalized judgment that helps people make better choices.

When I say engagement, I don't mean the generic sense of keeping an audience interested, though that matters too. I mean something more specific: experiential engagement that's directly relevant to the prevention message. When someone puts on simulation goggles and can't walk a straight line, the fumbling and stumbling isn't a warm-up act before the lesson; it IS the lesson. The experience of impairment directly supports the educator's message about why "I feel fine" is dangerous. The same principle applies to a video demonstration in an eLearning lesson that's visually engaging and relevant to the content. That's different from an icebreaker that captures attention but has nothing to do with impairment. The engagement this book is about captures attention through relevant experience, where the experience itself creates the felt understanding that makes the message stick.

■ **A Personal Journey**

I've invested nearly three decades developing educational tools for prevention. In 1996, I founded Innocorp after a near-tragedy in my neighborhood: an impaired driver nearly struck my young son. That moment transformed an abstract concern about impaired driving into a visceral understanding of what's at stake.

Out of that experience came the Fatal Vision® simulation goggles, the first product in what would become a suite of experiential tools. The goggles allow people to experience what impairment feels like. They create visual distortions that simulate the effects of alcohol or drugs on perception, coordination, and reaction time. When you put them on and try to walk a straight line or catch a ball, you understand, in your body, not just your mind, why impaired driving is dangerous.

Experiential learning takes different forms. Some experiential approaches teach skills: pilots practice emergencies in flight simulators, medical students rehearse procedures on mannequins, firefighters train in controlled burns. The experience builds competence that's available under pressure.

Other experiential approaches create insight. Healthcare workers wear aging suits (weighted garments with vision-limiting goggles) to feel what elderly patients experience. Wheelchair exercises help able-bodied people experience accessibility barriers firsthand. Care providers wear concussion simulation goggles to understand what someone with traumatic brain injury is experiencing, so they can serve TBI patients with greater compassion. The goal isn't skill-building; it's building empathy and understanding.

Prevention education uses both types of experiential learning. Some tools build skills, like interactive simulations that let students practice decision-making in realistic scenarios. Others create insight. Simulation goggles, for example, let people experience what impairment feels like. The experience creates engagement: "Wow! Is this what being drunk is really like?!" That engagement opens a door to learning. What educators do with that opening determines whether the moment becomes lasting understanding that leads to internalized judgment.

Over the years, simulation goggles and similar prevention tools have been used by educators, safety advocates, and prevention professionals worldwide. Millions of people have experienced what impairment feels like, gaining insight into how reaction time, situational awareness, and judgment are diminished. With proper follow-up, that insight can lead to better choices: deciding not to drive, or stepping in when someone else insists they're "fine to drive."

But in recent years, a recurring critique has emerged in some corners of the prevention field. Critics have begun saying that experiential education tools like simulation goggles "don't work." They cite research showing that attitude changes from a single demonstration fade after a few weeks. They point to the absence of long-term behavior change data. Some suggest educators should abandon experiential approaches entirely in favor of programs with stronger evidence of lasting behavior change.

This critique isn't just about my company's products; it's about a fundamental question: What role should experiential learning play in prevention? And it reflects, I believe, a framework question about how behavior change works and what any single intervention can reasonably accomplish.

I think back to an early moment that captured this tension perfectly. It was December, 1996 just a few months after I started Innocorp. The Milwaukee Journal Sentinel had run a story about a local school using our Fatal Vision goggles, the AP picked it up, and CNN Headline News contacted me about doing a segment. I flew from Wisconsin to Hackensack, New Jersey, where a local sheriff had become an advocate for the goggles.



The Milwaukee Journal Sentinel, December 26, 1996. Just months after Innocorp's founding, Fatal Vision Goggles earned front-page coverage. This photo shows sixth-grader Ashley Urban attempting the finger-touch field sobriety test while wearing the goggles during a substance abuse class at Rosenow School in Fond du Lac. This front-page story—picked up by the AP and leading to CNN coverage—marked the beginning of Fatal Vision's national visibility.

The demonstration went well: students, teachers, and reporters all tried the goggles. But at the end, the reporter asked the sheriff a pointed question: “How do you know these goggles work to reduce impaired driving?”

The sheriff’s response has stayed with me for nearly three decades: “It’s easy to measure the failures: we know when someone dies in an impaired driving crash. Measuring whether we reached someone, and that prevented a crash? That’s much harder. But if this demonstration saves even one life, it will have been worth it.”

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It’s easy to measure the failures: we know when someone dies in an impaired driving crash. Measuring whether we reached someone, and that prevented a crash? That’s much harder.

(Sheriff Quote)

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That sheriff, a law enforcement professional with no stake in my company, had articulated the measurement problem at the heart of prevention education. We can count the tragedies. We cannot easily count the decisions that saved lives: the keys that stayed in pockets, the rideshares that got called, the lives that continued because someone remembered what it felt like to be impaired.

The sheriff could answer the question “How do you know these goggles work to reduce impaired driving?” with a philosophical response. I couldn’t. As Fatal Vision grew, I faced that same question repeatedly, from educators weighing a purchase, from administrators justifying a budget, from critics challenging the approach. ‘Does this actually change behavior?’

And I didn’t have a good answer. I had testimonials. I had enthusiasm. I had years of hearing educators telling me the goggles ‘worked.’ But I didn’t have a framework for explaining how they worked or what we should reasonably expect them to accomplish. So, I did something that might seem unusual for a businessman in his mid-fifties: I went back

to school. In 2009, I enrolled in a doctoral program at the University of Wisconsin-Madison. For sixteen years, I took one class per semester while running my company, slowly working my way toward a Ph.D. in Mass Communication. In November 2025, I defended my dissertation on how and why prevention educators adopt certain tools over others.

What I learned in that journey challenged some of my own assumptions. But it also gave me a framework for understanding why the current critique of prevention education is both understandable and, in important ways, incomplete.

■ **The Core Argument**

This book makes a simple argument: Internalized judgment is portable.

By that I mean it travels with the person into every situation, including moments when no external intervention is present. It's there at the party when someone offers you keys. It's there on the dark road when no checkpoint is in sight. It's there in every decision moment because it lives inside you, not in the environment around you.

To understand why this matters, consider how we typically try to change behavior: how to reduce impaired driving, prevent drug abuse, promote healthy choices. We have several tools available. We can pass laws and create policies. We can enforce those policies through checkpoints and patrols and penalties. We can design technologies that prevent harmful behaviors or make healthy behaviors easier. And we can educate people.

Each of these approaches has value. Each has a role to play. But they work differently, and they show up in people's lives differently.

Enforcement is episodic. Checkpoints exist at certain places at certain times. Officers can't be everywhere. Most decisions happen when enforcement isn't present.

Technology is situational. Ignition interlocks work when they're installed. Rideshare apps work when your phone is charged and you have the app open. Technology doesn't follow you everywhere.

Policy is abstract. Laws define boundaries and consequences, but “.08 is illegal” is a legal fact, not an experienced reality. Most people don’t know their blood alcohol concentration. Policy is cognitively distant from the moment of choice.

Internalized judgment is portable. Prevention education, when it succeeds in building internalized judgment, becomes the only intervention present at the moment of decision. This is not a guarantee of good choices; people act against their own knowledge all the time. But it is a necessary condition. The other leverage points may or may not be present when the decision occurs. Internalized judgment, once built, is always available. Whether it tips the balance depends on how deeply it has been internalized, how strong the competing pressures are, and whether the person has the skills and environmental support to act on what they know.

This is why education remains necessary even when it’s not sufficient. Any move to minimize education in favor of “harder” interventions risks losing the only resource that the person carries with them.

■ **What This Book Will Do**

In the pages that follow, I’ll make the case for participants’ engagement essential role in prevention. I’ll draw on communication theory, behavior change research, my own doctoral work, and nearly thirty years of practical experience.

Part One examines the prevention ecosystem: the different tools we have for changing behavior and how they relate to each other. I’ll introduce the framework of “four leverage points” and explain why the knowledge, skills, and judgment that education builds through engagement are uniquely portable, and therefore uniquely valuable.

Part Two tackles the measurement problem head-on. I’ll explain why asking “does education change behavior?” is the wrong question, and what we should be asking instead. I’ll introduce the concepts of proximal

(immediate) and distal (long-term) outcomes and show why measuring engagement tools by behavior change is like asking whether a spark plug drives a car.

Part Three dives into the science of behavior change. Drawing on McGuire's Information Processing Model, Fishbein's Integrative Model, and Gilbert's Behavior Engineering Model, I'll explain why attention is the gate through which influence must pass, and why engagement is how we open that gate.

Part Four explores experiential learning and the power of making the invisible visible. I'll share findings from my doctoral research explaining why physical demonstration tools achieve adoption where digital alternatives struggle, and what that reveals about the essential role of observable engagement.

Part Five is practical. It's about how to build comprehensive programs that integrate experiential tools effectively, and how to respond when someone tells you your educational tools "don't work."

Throughout, my goal is not just to defend experiential education, but to advance understanding of how prevention education works. Whether you use my company's products or not, I want you to finish this book with a clearer sense of participant engagement's role in building internalized judgment, and a stronger ability to articulate why your work matters.

Because it does matter. More than the current conversation acknowledges.

Internalized judgment is portable. And portable is powerful.

■ **Who This Book Is For**

This book is for anyone who uses, funds, evaluates, or questions experiential approaches to prevention education.

If you're a prevention educator who uses hands-on tools and needs to articulate why they matter, this book gives you a framework and language for responding to critics.

If you're a program administrator or funder deciding whether to invest in experiential approaches, this book explains what these tools actually accomplish and how to measure them appropriately.

If you're a researcher or evaluator assessing prevention programs, this book challenges you to match your measures to what interventions are designed to do.

If you're a skeptic who's heard that experiential tools "don't work," this book offers a different perspective, grounded in communication theory and behavior change research.

If you're a law enforcement professional working in traffic safety, this book explains how education fits into the larger ecosystem that includes the enforcement work you do every day.

And if you're simply someone who cares about prevention and wants to understand how education fits into the larger ecosystem of behavior change, this book is for you too.

PART ONE

THE PREVENTION ECOSYSTEM

CHAPTER 1

Four Leverage Points for Behavior Change

Prevention is fundamentally about behavior change. Whether we're trying to reduce impaired driving, prevent drug abuse, promote seatbelt use, or encourage any other health- or safety-protective behavior, the goal is the same: shape judgment so that people choose differently than they otherwise might.

Over the decades, prevention professionals have developed many approaches to this challenge. But when you step back and look at the landscape, most interventions fall into one of four categories. I call these the four leverage points of prevention.

■ Policy

The first leverage point is policy. Laws, regulations, rules, and formal guidelines that define what's permitted and what's prohibited. Policy sets the boundaries within which behavior occurs.

In the impaired driving context, policy includes laws that set blood alcohol limits, establish penalties for violations, and require ignition interlocks for repeat offenders. More broadly, policy encompasses zoning laws that limit alcohol outlet density, regulations on advertising, age restrictions on purchase, and liability laws that create consequences for serving intoxicated patrons.

Policy works by changing the formal environment in which decisions occur. It creates legal consequences for harmful behaviors and legal protections for beneficial ones. When policy works well, it shifts norms over time: what was once acceptable becomes prohibited and eventually becomes unthinkable.

The limitation of policy is abstraction. Laws exist on paper and in databases. They define what happens if you're caught, but they don't intervene directly in the moment of choice. A person standing in a parking lot with keys in hand may be aware of legal limits and penalties, but that awareness is internalized knowledge, not the policy itself. Policy shapes the environment and, when its provisions become known, contributes to internalized judgment. But policy alone, without enforcement, education, or other supports, often fails to change behavior.

■ **Enforcement**

The second leverage point is enforcement. This includes police patrols, checkpoints, breathalyzer testing, and all the mechanisms that detect violations and impose consequences.

Enforcement makes policy real. A law that's never enforced is just words. Enforcement creates actual risk of being caught, actual consequences for violations. It transforms abstract prohibition into concrete deterrence.

The evidence for enforcement is strong. Sobriety checkpoints reduce alcohol-related crashes. Visible police presence deters speeding. Swift and certain consequences reduce reoffending. Enforcement works.

But enforcement has limits. It's expensive: you can't put officers everywhere. It's episodic: checkpoints, only allowed in some states, operate at particular times and places. It's reactive: it catches violations but doesn't prevent the decision to violate in the first place. And it can create resentment if seen as unfair or excessive.

Enforcement is most effective as general deterrence, creating awareness that violations may be detected and punished. That awareness, once internalized, influences behavior even when enforcement isn't present. But creating that awareness requires education.

No single intervention works in isolation. Enforcement works when violations lead to consequences. Education requires reinforcement to produce lasting change. Technology requires adoption to make a

difference. Policy requires implementation to matter. Each approach depends on an ecosystem that supports it.

■ **Technology**

The third leverage point is technology. This includes devices that prevent harmful behavior (ignition interlocks that won't let you start the car if you've been drinking), tools that make safe behavior easier (rideshare apps, designated driver services), and systems that detect and respond to problems (in-vehicle alcohol detection systems, crash avoidance technology).

Technology has transformed prevention. Ignition interlocks prevent hundreds of thousands of drunk driving attempts each year. Rideshare services have given people alternatives to driving impaired. Soon, vehicles may be equipped with passive alcohol detection that prevents anyone over the limit from driving.

But technology has limits too. It must be deployed: interlocks only work for people who have them installed, typically after a conviction. Modern interlock technology is increasingly difficult to circumvent, though determined users may simply drive a different car. And it doesn't change understanding or motivation; it controls behavior without building judgment.

■ **Education**

The fourth leverage point is education. This includes formal programs in schools, public awareness campaigns, community education efforts, and all the ways we try to shape knowledge, attitudes, and skills.

Education is the leverage point that builds internalized judgment. When education works, when it truly engages people and changes how they understand a behavior, that understanding becomes part of how they see the world; that understanding is present in every relevant situation. It doesn't require installation or deployment or physical presence. It's always there.

Education doesn't happen only in classrooms or programs. It happens at home, in cars, at dinner tables, wherever children observe adults making decisions.

Social learning theory, developed by Albert Bandura, demonstrates that people learn by observing others, especially role models they trust. Children who watch parents buckle seatbelts, obey speed limits, and never drive after drinking are learning internalized judgment long before any formal prevention program reaches them. Children who watch parents text while driving or laugh off "just a couple of beers" are learning something too.

This has implications for prevention strategy. By the time young people encounter a school-based program, they've already absorbed years of modeled behavior. Education programs aren't writing on a blank slate; they're reinforcing or challenging patterns that began in childhood. This makes parental modeling one of the most powerful, and most overlooked, forms of prevention education.

■ **The Ecosystem View**

None of these leverage points works in isolation. The most successful prevention efforts (the ones that have produced durable, population-level behavior change) have used all four in combination.

Consider the dramatic reduction in impaired driving deaths over the past four decades. In 1982, alcohol-impaired driving fatalities in the United States exceeded 21,000. By 2019, that number had fallen below 10,500, a reduction of more than fifty percent, even as total miles driven increased substantially. That year, 2019, marked the lowest percentage of alcohol-impaired driving fatalities on record. The numbers have since climbed back above 12,000 since the pandemic, a reminder that progress in prevention is never permanent and requires sustained effort.

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**Prevention is never permanent
and requires sustained effort.**

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This reduction of alcohol-impaired driving fatalities didn't happen because of any single intervention. It happened because of a comprehensive, multi-pronged approach that combined all four leverage points:

Policy changes lowered legal blood alcohol limits, raised the drinking age, and created tougher penalties. Enforcement expanded through checkpoint programs and improved detection methods. Technology introduced ignition interlocks, improved vehicle safety, and eventually rideshare alternatives. And education, through school programs, public campaigns, and grassroots movements like MADD, changed how Americans think about impaired driving. Together, these forces shifted social norms: drinking and driving became not just illegal and risky, but socially unacceptable.

The same pattern holds for other prevention successes. Seatbelt use increased through a combination of laws, enforcement, engineering (automatic belts, then airbags), and education. Smoking declined through tobacco taxes, clean air policies, advertising restrictions, and massive public education efforts. No single intervention carried the load.

■ **How the Leverage Points Strengthen Each Other**

These leverage points don't just coexist; they actively strengthen each other.

Policy supports education by creating consequences that reinforce educational messages. "Don't drink and drive because it's dangerous" becomes more powerful when backed by "and you'll get arrested." The policy gives education teeth.

Education supports policy by helping people understand why the policies exist. A law that's seen as arbitrary is resented and evaded. A law that's understood as protective is more likely to be internalized and followed voluntarily.

Enforcement supports education by providing concrete examples and consequences. The person who got caught becomes a story educators can tell. The checkpoint becomes a tangible reminder that the risk is real.

Education supports enforcement by amplifying perceived risk. Someone who understands how enforcement works, who has seen news coverage of checkpoint operations, perceives greater risk than someone who hasn't thought about it.

Technology supports education by providing concrete tools that educators can point to. "Here's what you can do instead of driving drunk" is more powerful when there's an actual app to download.

Education supports technology by promoting adoption and use. Someone who understands why interlocks exist is more likely to support their use. Someone who has positive attitudes toward rideshare services is more likely to call for a ride.

The integration principle is clear: each prevention strategy supports and enhances the others. Policy without education feels arbitrary. Education without policy lacks teeth. Enforcement without education breeds resentment. Education without enforcement lacks credibility. Technology without education goes unused. Education gains power when practical alternatives are readily available and integrated into the educational experience.

The most effective prevention efforts integrate all four strategies intentionally, designing each to support the others.

This ecosystem view is essential for understanding why engagement matters. The question of whether education "alone" changes behavior, while understandable, may not be the most productive framing. Nothing alone changes behavior at scale. The more useful question is whether prevention education, through participant engagement, contributes something essential that other leverage points cannot provide.

The answer is yes. Prevention education, when it creates genuine engagement, builds internalized judgment: the portable capacity to make better decisions when no other intervention is present. And that's what we'll explore in the next chapter.

CHAPTER 2

Why Prevention Education is Different

In the last chapter, I described four leverage points for changing behavior: policy, enforcement, technology, and education. Each has strengths and limitations. But prevention education has a characteristic that sets it apart from the others.

Internalized judgment is portable.

“ **Internalized judgment is portable.** ”

This isn't just a slogan. It's a fundamental difference in how education works compared to other interventions, and understanding it helps explain why education remains essential even as we develop more sophisticated policies, enforcement strategies, and technologies.

Prevention education is not portable because it delivers information. It is portable because, when effective, it relocates judgment from the environment to the individual.

■ What Portability Means

Let me illustrate what this looks like in practice.

Consider a young person who has genuinely internalized why impaired driving is dangerous. They understand that their subjective sense of “feeling fine” is unreliable because impairment affects the very cognitive functions needed to assess impairment. They know that reaction time degrades before they notice anything wrong. They've experienced (perhaps through simulation goggles) what it feels like to try to navigate the world with impaired perception and coordination.

Now put that person at a party where alcohol is flowing. They've had a few drinks. Their friends are getting ready to leave, and someone offers them a ride or suggests they drive themselves.

In that moment, where is the policy? The law exists, but it's not present in the room. The person isn't thinking about legal codes or penalty schedules. Policy is abstract: it defines consequences but doesn't intervene in the decision.

Where is the enforcement? There might be a checkpoint somewhere on the roads tonight, but probably not between here and home. The probability of being stopped on this trip is low. Enforcement is episodic: it creates general deterrence but isn't present in this moment.

Where is the technology? Maybe they have a rideshare app on their phone, but they'd have to decide to use it. Maybe their car has safety features, but those won't prevent them from getting behind the wheel. Technology is situational: it must be activated or deployed to work.

“ **Technology is situational—it must be activated or deployed to work.** ”

Where is the internalized judgment? It's there. In their mind. In their understanding of how impairment works. In their memory of what it felt like to try to walk a straight line in simulation goggles and fail. That judgment doesn't require activation or deployment. It doesn't depend on checkpoints or devices. It's part of who they are and how they think.

Education builds internalized judgment because it changes the person, not just the environment. And persons' internal judgement goes everywhere—it's portable.

■ **The Geography of Intervention**

Another way to think about this is in terms of where each intervention “lives.”

Policy lives in systems: in law books, regulations, institutional rules. It shapes the formal structure within which behavior occurs, but it exists outside the individual.

Enforcement lives in places: at checkpoints, on patrol routes, in spaces where officers or monitors are present. It creates consequences when behavior enters those spaces, but most behavior happens elsewhere.

Technology lives in objects: in devices, apps, vehicles, environments. It requires physical presence and active engagement to function.

Education lives in people: as internalized judgment. It becomes part of their mental equipment, their way of understanding the world. And people carry that equipment everywhere they go.

This geographic perspective helps explain why comprehensive prevention requires all four leverage points. Policy creates the framework. Enforcement activates it in specific places and times. Technology extends it into more situations. But internalized judgment is what bridges the gaps: the countless moments when no system, no officer, and no device is present.

■ **The Persistence Paradox**

Critics of experiential approaches often point to research showing that attitude changes from single demonstrations fade over time. They're right that this happens: studies consistently show that the immediate impact of an educational message or experience diminishes without reinforcement.

But this finding is often misinterpreted. The fact that effects fade without reinforcement isn't evidence that education doesn't work; it's evidence that education needs to be sustained. It's a program design issue, not a tool failure.

Consider an analogy. If someone takes antibiotics for two days instead of the full ten-day course and the infection returns, we don't conclude that antibiotics don't work. We conclude that the protocol wasn't

followed. The antibiotic did what it was supposed to do: it attacked the infection. The recurrence happened because the treatment was discontinued too soon.

Similarly, when attitude changes from a single educational demonstration fade after a few weeks, the finding confirms that education needs reinforcement, not that education is ineffective. The demonstration captured attention and created initial impact. What happened next was a program design question.

The real question isn't whether a single educational exposure produces permanent change. It's whether sustained educational programming, integrated with other interventions, contributes to durable behavior change. The answer from decades of prevention research is clearly yes.

■ **Suppression vs. Reshaping**

There's one more distinction worth making. Policy, enforcement, and technology primarily work by suppressing behavior, making the undesired action more difficult, more costly, or more likely to be detected. Education works by reshaping judgment, changing how people think about and approach decisions.

Both are valuable. Suppression can prevent harm even when judgment hasn't changed. If an ignition interlock prevents a person from driving impaired, it doesn't matter whether they've internalized the reasons why impaired driving is dangerous. The behavior is blocked.

But suppression has limits. It requires continued presence of the suppressing mechanism. Remove the interlock, and the behavior can return. Reduce checkpoint visibility, and deterrence fades. Suppression controls behavior; it doesn't transform the person making choices.

Education facilitates the reshaping of judgment when it creates conditions for discovery rather than correction. When it works, people don't just avoid behavior because of external constraints; they genuinely

don't want to engage in it. They understand why it's harmful. They've internalized values and knowledge that guide their choices even when no one is watching.

“ Education facilitates the reshaping of judgment when it creates conditions for discovery rather than correction. ”

The distinction matters because prevention isn't just about reducing incidents during intervention. It's about creating lasting change that persists when the intervention is no longer present. Policy, enforcement, and technology can suppress impaired driving. Education, when it builds internalized judgment, is what reduces its re-emergence.

One controls behavior. The other reshapes judgment. Comprehensive prevention needs both.

“ One controls behavior. The other reshapes judgment. Comprehensive prevention needs both. ”

CHAPTER 3

The Moment of Decision

Every prevention effort ultimately aims at a moment of decision. A moment when someone chooses to drive or not to drive. To drink or not to drink. To use or not to use. To act or not to act.

“ **Every prevention effort ultimately aims at a moment of decision.** ”

That moment is where prevention succeeds or fails. Everything else (the policies, the programs, the campaigns, the technologies) exists to influence what happens in that moment.

Understanding this helps clarify why education is essential.

■ What's Present at the Moment

Think about a specific decision point. A person has been drinking at a friend's house. The party is winding down. They need to get home. In their pocket are keys to their car, parked outside. Their phone has a rideshare app. They're not falling-down drunk, but they've had enough that their judgment and coordination are impaired, whether they realize it or not.

What resources do they have for making a good decision in this moment?

From policy: The knowledge that impaired driving is illegal and that there are penalties if caught. But the law isn't going to intervene in this moment. It defines consequences but doesn't make the decision.

From enforcement: The awareness that there might be checkpoints or patrols. But the probability of encountering one on this route at this

this time is low. Most trips home from parties don't intersect with enforcement.

From technology: A phone with a rideshare app. But they must decide to use it. The technology is available but passive; it won't make the decision for them. (Unlike an ignition interlock, which would actively prevent them from driving, but interlocks are only installed for people who've already been convicted.)

From education: Whatever understanding they have about impairment, risk, and consequences. Their beliefs about their own driving ability after drinking. Their knowledge about how alcohol affects judgment and reaction time. Their values about personal responsibility and the safety of others.

Notice what's fully present in the moment of decision: only internalized judgment. The policy exists abstractly. Enforcement exists probabilistically. Technology exists as an option requiring activation. But whatever understanding and judgment the person has developed is there, in their mind, available to influence the decision.

■ **The “I Feel Fine” Problem**

One of the most dangerous aspects of alcohol impairment is that it undermines the capacity for accurate self-assessment. The very cognitive functions needed to evaluate whether one is impaired (judgment, critical thinking, self-awareness) are among the first things affected by alcohol.

This creates a paradox. The more impaired someone is, the less likely they are to recognize their impairment. “I feel fine” becomes the most dangerous phrase in prevention, because it reflects not accurate self-assessment but impaired self-assessment.

Policy and enforcement can't solve this problem directly. A law that says “.08 is illegal” doesn't help someone who has no way to know their blood alcohol concentration and whose judgment about their

own state is compromised. Policy can also send the wrong message: the .08 limit implies that anything below it is acceptable, when impairment begins well before that threshold. Drivers can be arrested below .08, but prosecution becomes difficult, reinforcing the false belief that “under the limit” means “safe to drive.”

Technology can help: a personal breathalyzer could provide objective data. But most people don’t carry breathalyzers, and the decision to use one requires recognizing that you might be impaired.

Education is essential here. Understanding that “I feel fine” is unreliable, that impairment undermines self-assessment, that the feeling of being okay is precisely what impairment produces. This understanding is what can break through the paradox. Someone who knows this will be skeptical of their own sense of being fine.

Experiential education is particularly powerful for this lesson. When someone puts on simulation goggles and tries to perform simple tasks, they often feel more capable than they are. The gap between felt competence and actual performance is the lesson: that you can feel fine while being significantly impaired, is one that sticks.

■ **Implications for Prevention Design**

This analysis has practical implications for how we design prevention programs.

First, it argues against either/or thinking. The question isn’t whether to invest in enforcement or education, technology or policy. All four leverage points serve different functions, and comprehensive prevention requires all of them working together.

Second, it suggests that education should be evaluated by what it contributes, not by whether it achieves total success alone. Asking whether education by itself produces permanent behavior change is the wrong question. The right question is whether education, through engagement, builds internalized judgment that other interventions

cannot provide. The answer is yes: education builds the internalized judgment that is present at the moment of decision.

Third, it highlights the importance of educational approaches that create genuine engagement. Not all education builds internalized judgment equally well. Didactic instruction may be forgotten. But experiential learning (learning that involves the body and emotions as well as the intellect) tends to be more memorable and more available in decision moments. As Kolb's experiential learning theory suggests, direct experience creates knowledge in ways that abstract instruction cannot. And as Albert Bandura's social cognitive theory emphasizes, such experiences shape self-efficacy (our beliefs about our own capabilities), which in turn influences behavior.

Finally, it reminds us that prevention is ultimately about people making choices. We can build systems and deploy technologies and pass policies, but in the end, prevention depends on what people do in countless individual moments. Engagement is how we build the internalized judgment that influences those moments from the inside.

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Prevention depends on what people do in countless individual moments. Engagement is how we build the internalized judgment that influences those moments from the inside.

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PART TWO

THE MEASUREMENT PROBLEM

CHAPTER 4

What We Ask vs. What We Measure

When someone says an educational intervention “doesn’t work,” they mean something specific. They’re saying that studies have failed to show the outcome they were looking for.

But what outcome were they looking for? And is it the right one to expect from the intervention being studied?

This is the measurement problem at the heart of debates about prevention education. We often ask interventions to demonstrate outcomes they weren’t designed to achieve, then declare them failures when they don’t achieve them.

■ The Default Question

The default question in prevention research is: “Does this intervention change beliefs, attitudes, or behavior?” For impaired driving, that means: “Do people who receive this intervention show different beliefs about impairment, different attitudes toward impaired driving, or reduced impaired driving behavior?”

These seem like reasonable questions. After all, belief, attitude, and behavior change are the ultimate goals. Why wouldn’t we measure whether they changed?

The problem is that these questions make sense for comprehensive programs but not for individual tools within those programs. Evidence-based programs typically involve multiple sessions over weeks. They can reasonably be expected to show changes in beliefs and attitudes. Some show behavior change. But when we ask whether a specific educational activity, like a simulation goggle demonstration, produces

these outcomes, we're asking a question that's mismatched to what the activity does.

A simulation goggle demonstration lasts maybe five or ten minutes. It creates an experience of impaired perception. It generates attention, curiosity, and often surprise. It opens a conversation about impairment and risk.

Does anyone seriously believe that a five-minute experience should permanently change beliefs, attitudes, or behavior? Does a single classroom activity on any topic produce lasting change without reinforcement? Does any brief exposure to any educational content shape lifelong choices?

Research does show that experiential demonstrations produce short-term attitude change (Hennessy and others have documented this). The question isn't whether the immediate impact is real. It's whether we should expect that impact to persist without reinforcement.

We know from learning science that knowledge and skills require repetition and reinforcement to stick. We know that attitudes developed over years don't shift permanently from a single experience. We know that behavior is shaped by a complex web of factors, not a single intervention.

“ Knowledge and skills require repetition and reinforcement to stick. We know that behavior is shaped by a complex web of factors, not a single intervention. ”

The evaluation challenge is matching our measures to what single exposures can reasonably accomplish.

■ A Better Question

A better question is: “Does this intervention do what it’s designed to do, and does that contribution matter?”

For simulation goggles, the appropriate questions might be: Do the goggles capture attention? Do they create engagement? Do they produce an accurate experience of impaired perception? Do they open conversations that educators can build on? Do they create memorable moments that support later decision making?

These questions ask about the tool’s actual function rather than the ultimate outcome of an entire prevention effort. They recognize that the tool is a component, not a complete solution.

And by these standards, simulation goggles work quite well. Studies consistently show that they capture attention, create engagement, and produce short-term attitude change. The fact that those attitude changes fade without reinforcement doesn’t mean the tool failed; it means the tool did what it does, and what happens next depends on program design.

CHAPTER 5

Proximal and Distal Outcomes

In my research, I distinguish between proximal and distal outcomes. Proximal outcomes are immediate and direct: they happen close to the intervention in time and causal chain. Distal outcomes are downstream and indirect: they happen later and result from a chain of events that the intervention influences but doesn't directly produce.

This distinction is crucial for understanding how to evaluate prevention interventions.

■ Defining the Terms

For an experiential educational tool like simulation goggles, proximal outcomes might include: Attention captured—did participants focus on the experience? Engagement generated—did participants interact actively with the tool? Emotional response produced—did participants react with surprise, concern, or other feelings? Immediate knowledge gain—did participants learn something they didn't know before? Short-term attitude shift—did participants' stated attitudes change immediately after the experience? Conversation initiated—did the experience open dialogue between educators and participants?

These outcomes are close to the intervention. They happen during or immediately after the experience. They are what the tool directly produces.

Distal outcomes, by contrast, are further removed: Durable attitude change—did attitude shifts persist over weeks, months, or years? Behavioral intention—did participants form intentions to act differently? Actual behavior change—did participants behave differently in real

situations? Population-level outcomes: did rates of impaired driving decrease in the population exposed to the intervention?

These outcomes are downstream from the intervention. They depend not just on the tool itself, but on what happens afterward: whether the initial impact is reinforced, whether the knowledge gained is integrated into lasting understanding, whether environmental factors support or undermine the desired behavior.

■ **The Category Error**

The current critique of experiential education tools makes a category error: it judges tools designed to produce immediate engagement by whether they produce long-term behavior change.

When critics say simulation goggles “don’t work,” they typically mean that studies haven’t shown long-term changes in beliefs, attitudes, or behavior from goggle demonstrations alone. That’s judging a tool designed to produce immediate engagement by whether it produces lasting change.

It’s like evaluating a first date by whether it produced a lasting marriage. A first date serves proximal functions: creating attraction, opening conversation, generating interest in future interaction. Whether those proximal outcomes lead to the distal outcome of lasting partnership depends on everything that happens afterward.

A good first date can fail to produce a marriage if there’s no second date. That doesn’t mean the first date didn’t work; it means the process wasn’t continued.

Similarly, a goggle demonstration can capture attention and create engagement, doing exactly what it’s designed to do, but fail to produce lasting behavior change if there’s no follow-up programming. That doesn’t mean the demonstration failed. It means the process wasn’t completed.

CHAPTER 6

The Spark Plug Problem

Let me make the measurement problem concrete with an analogy.

A car engine contains many components. One of them is the spark plug. The spark plug's job is specific: it creates a spark that ignites the fuel-air mixture in the cylinder. That's all it does. It doesn't compress the fuel. It doesn't move the pistons. It doesn't turn the wheels.

If you evaluated the spark plug by asking, "Does this component drive the car?" the answer would be no. The spark plug doesn't drive the car. It creates a spark.

But that doesn't mean the spark plug doesn't work or isn't important. Without the spark, the engine doesn't run. The spark plug serves an essential function; it's just not the ultimate function of the entire system.

“ Engagement tools in prevention are like spark plugs in engines. They serve a specific function: capturing attention, creating engagement, opening the door to learning. ”

Engagement tools in prevention are like spark plugs in engines. They serve a specific function: capturing attention, creating engagement, opening the door to learning. They don't, by themselves, change long-term behavior. But without them, the rest of the prevention program may not work.

When someone asks, "Do simulation goggles change long-term behavior?" you're asking the wrong question, like asking if a spark

plug drives a car. The goggle demonstration isn't supposed to change long-term behavior by itself. It's supposed to capture attention and create engagement. And without that engagement, the rest of the program won't work.

This is why the critique of experiential tools, though understandable, applies the wrong standard. Yes, a goggle demonstration alone doesn't produce lasting behavior change. Neither does a spark plug alone produce forward motion. But both serve essential functions within larger systems.

■ **The System Perspective**

A car engine is a system. It has many components: spark plugs, pistons, crankshaft, fuel injection, exhaust, and so on. Each component serves a specific function. None of them alone drives the car. But working together, they produce motion.

Prevention programs are also systems. They have many components: policy, enforcement, technology, and education, along with awareness campaigns, skill-building exercises, peer influence interventions, environmental supports, and so on. Each component serves a specific function. None of them alone changes population-level behavior. But working together, they can.

The appropriate evaluation strategy is parallel to the car engine. Test the system as a whole for ultimate outcomes. Test individual components for their specific functions. Don't demand that each component achieve what only the system can achieve.

■ **What Happens When You Remove the Spark Plug**

Here's a thought experiment. Imagine removing spark plugs from car engines because they don't, by themselves, drive cars. What would happen?

The engines wouldn't run. All the other components (pistons, crankshaft, fuel injection) would be present, but without the ignition spark, nothing would happen. The fuel wouldn't combust. The pistons wouldn't fire. The car wouldn't move.

Now imagine removing engagement tools from prevention programs because they don't, by themselves, change long-term behavior. What would happen?

The programs would lose their opening. All the other components (curriculum, skill-building, follow-up) would be present, but without the initial engagement, they would fall flat. Information would wash over disengaged audiences. Skills training would bore students who aren't paying attention. Follow-up would reach people who never connected with the topic in the first place.

Engagement tools serve the ignition function in prevention programs. They create the spark that makes everything else work. Removing them because they don't achieve ultimate outcomes by themselves would diminish the programs they're part of.

PART THREE

HOW BEHAVIOR ACTUALLY CHANGES

CHAPTER 7

Attention is the Gate

If we want to understand why engagement tools matter, we need to understand how persuasive communication works. And that starts with a fundamental insight: attention is the gate through which influence must pass.

■ The Persuasion Sequence

Communication researchers discovered decades ago that persuasion follows a predictable sequence. Understanding this sequence explains why engagement tools matter, and what they can and can't accomplish.

The social psychologist William McGuire proposed that persuasion follows a sequence of steps. First, exposure: the person must encounter the message. Second, attention: the person must pay attention to the message. Third, comprehension: the person must understand what the message means. Fourth, acceptance: the person must accept or agree with the message. Fifth, retention: the person must remember the message over time. Finally, behavior: the person must act on the message.

The critical insight is that these steps are sequential. You cannot skip them. If someone isn't exposed to a message, they can't attend to it. If they don't attend, they can't comprehend. If they don't comprehend, they can't accept. And so on down the chain.

McGuire's model implies that a campaign is like a chain: it cannot be stronger than its weakest link. A prevention program with brilliant content fails if no one pays attention to it. A compelling message falls flat if it doesn't reach the audience or isn't understood.

■ **The Attention Bottleneck**

In McGuire's sequence, attention is the crucial second step. Exposure gets the message in front of the person, but attention determines whether the message gets through.

This matters because attention is scarce. People are bombarded with information, from media, advertising, social networks, and their immediate environment. They can't attend to everything. So they filter, usually unconsciously, focusing on some things and ignoring others.

Prevention messages compete in this cluttered attention environment. A student who's heard anti-drunk-driving messages since elementary school may have become habituated to them; the messages don't register because they're too familiar. A young adult at a party isn't thinking about safety messaging; they're thinking about having a good time.

This is why engagement matters. Engagement tools work precisely because they break through the attention filter. They do something unexpected. They create an experience rather than delivering a message. They involve the body as well as the mind. They generate curiosity and emotion.

■ **Why Correction Fails**

Recent research in political communication and health communication has deepened our understanding of why information alone doesn't change minds. The work of Brendan Nyhan and others has killed a comforting myth: that misinformation is simply a knowledge deficit problem. If people just had the facts, the thinking went, they'd update their beliefs. Reality is messier.

In a widely cited 2010 study, Nyhan and Jason Reifler documented what they called the "backfire effect"—a finding that subsequent research has shown to be rarer than initially thought, though it illustrates a broader truth about correction's limitations. They showed people news articles containing political misinformation (claims about

weapons of mass destruction in Iraq, for example) followed by factual corrections. Among people whose political identity was tied to the original claim, the corrections didn't just fail to persuade. They actually strengthened the misperception. People emerged more confident in the false belief than before they read the correction.

The implications for health communication were profound. In 2014, Nyhan's team tested CDC messages designed to increase childhood vaccination rates. They tried four approaches: correcting the myth that MMR vaccines cause autism, presenting information about disease risks, showing photos of children sickened by measles, and sharing a mother's story about her hospitalized child. None of these increased parents' intentions to vaccinate. The autism correction successfully reduced false beliefs, but among parents with the strongest anti-vaccine attitudes, it actually decreased their intent to vaccinate. The cure was worse than the disease.

As Nyhan observed: "This highlights the extent to which we tend to overrate how persuasive facts and evidence are in all kinds of domains."

The evidence across multiple fields converges on a crucial insight: you usually don't change minds by "correcting" people. You change minds by changing the conditions under which people feel safe revising a belief.

Why does correction fail? Several mechanisms are at work.

First, beliefs are rarely just beliefs. They're tied to identity, values, and social belonging. When a message threatens identity, the brain treats it like a threat, not information. Corrections can backfire not because they're wrong, but because they imply "people like you are wrong." That triggers motivated reasoning: people defend the belief to defend themselves.

Second, trust beats accuracy. People are far more likely to update beliefs when information comes from a trusted in-group source than

from an external authority. The same message lands differently when delivered by a peer, a local figure, or someone perceived as “one of us” versus an outside expert or government official. The content matters less than the relationship.

Third, there’s what researchers call “danger priming.” Nyhan’s team found that showing parents images of children sick with measles actually increased their concerns about vaccine side effects. The mechanism: if you’re exposed to images of sick children, it becomes easier to bring to mind other ways children could get sick, including from the vaccine. Fear-based messaging can activate the very anxieties it’s meant to overcome.

Fourth, showing consequences works better than giving arguments, but only certain kinds of consequences. Abstract facts are weak persuaders. Concrete, observable outcomes are strong, but only when they don’t trigger the danger-priming effect. This aligns with diffusion theory and the observability effects we discussed earlier: people update their beliefs when they can see results or imagine themselves experiencing them. Personal discovery outperforms external correction.

This research validates the experiential approach. Simulation goggles don’t “correct” anyone. They don’t say “you’re wrong about impairment.” They create conditions for discovery. The person realizes something themselves: their confidence exceeded their capability. There’s no identity threat because the insight comes from within. The tool doesn’t lecture; it reveals.

Notice the difference between “studies show that impaired drivers overestimate their abilities” and “I just tried to walk a straight line and couldn’t.” The first is a correction: someone telling you what’s true. The second is discovery: you finding out for yourself. The first triggers defenses. The second bypasses them.

A school resource officer in Alabama who built his own distracted driving program observed why pure prohibition fails: “DARE didn’t give the kids why. It was just, don’t do this. But when you don’t tell a kid why—if you just say don’t do—then they’re going to go do it to find out why you’re telling them not to.” The goggles provide the why. Students don’t need to be told that texting impairs driving. They discover it.

“

The goggles provide the why.

”

The implication is profound: truth alone is not a strategy. Truth still matters, but persuasion is a social process, not a data transfer. Facts support change. They don’t cause it. The educators who succeed are the ones who understand this, who create conditions for discovery rather than delivering corrections.

“

Truth alone is not a strategy.

”

CHAPTER 8

From Attitude to Action

Capturing attention opens the gate. But what happens after the gate is open? How do we move from initial engagement through attitude change to actual behavior?

For this, we need to look beyond McGuire's model to understand the factors that shape behavioral intention and, ultimately, behavior itself.

■ Fishbein's Integrative Model

The social psychologist Martin Fishbein spent his career trying to understand what predicts behavior. His Integrative Model, developed and refined over decades, identifies the key factors.

The model proposes that behavior flows from intention. If someone intends to avoid impaired driving, they're likely to avoid it. If they don't have that intention firmly in place, even good knowledge won't protect them.

Intention, in turn, flows from three sources:

- *Attitudes*: What the person believes about the behavior and how they evaluate it. Do they see impaired driving as dangerous? Do they value safety? Do they believe they're at risk?
- *Perceived norms*: What the person believes others think and do. Do they believe their friends would disapprove of impaired driving? Do they think others in their peer group avoid it?
- *Self-efficacy*: The person's belief in their ability to perform the desired behavior. Do they believe they can get home safely without driving drunk? Do they know how to arrange alternative transportation?

All three factors influence intention. A person might have negative attitudes toward impaired driving but weak intention to avoid it if they believe all their friends do it (norm influence) or if they don't think they can easily get home otherwise (efficacy influence).

■ **Where Engagement Fits**

Engagement—and the education it enables—can influence all three of Fishbein's factors.

Attitudes: Education can shape beliefs about the behavior (helping people understand the true risks of impairment) and evaluations of outcomes (making safety more salient and valued).

Perceived norms: Education can correct misperceptions about what others think and do. Research consistently shows that young people overestimate how much their peers drink and how accepting their peers are of impaired driving. Normative education can correct these misperceptions.

Self-efficacy: Education can build skills and confidence. Teaching people how to refuse drinks, how to plan for transportation, how to intervene when a friend is about to drive impaired, all of these build the perceived ability to engage in protective behaviors.

But here's the catch: education competes with other influences on all three factors. Attitudes shaped by education compete with attitudes shaped by experience, media, and culture. Norms conveyed in educational settings compete with norms perceived in peer groups. Skills taught in programs compete with situational pressures and habits.

“

Education is one voice among many. It can be powerful, but it's never the only influence. That's why engagement matters—it determines whether education's voice gets heard at all.

”

Education is one voice among many. It can be powerful, but it's never the only influence. That's why engagement matters—it determines whether education's voice gets heard at all.

CHAPTER 9

The Environment and the Individual

So far we've focused on what's happening inside the person (attention, attitudes, intentions). But behavior doesn't happen in a vacuum. It happens in environments that can support or undermine individual intentions.

For this broader view, I turn to Thomas Gilbert's Behavior Engineering Model.

■ Gilbert's Framework

I first encountered Thomas Gilbert's work in the late 1980s, near the end of my management consulting career. I wrote about his human performance model for the *Journal of Management Consulting*, and his book *Human Competence: Engineering Worthy Performance* became one of the most influential frameworks in my thinking, not just for improving organizational performance, but for understanding behavior change more broadly.

Gilbert was a human performance expert who noticed that when people fail to perform well, organizations typically blame the individual: their knowledge, motivation, or capacity. But Gilbert's research showed that environmental factors often matter more.

His model identifies six factors that influence performance, organized into two categories:

Environmental supports include:

- *Information:* Does the environment provide clear data about what to do and how to do it?
- *Resources:* Are the tools, materials, and time available to perform the behavior?

- *Incentives:* Do the consequences in the environment reward the desired behavior and discourage the undesired?

Individual repertory includes:

- *Knowledge:* Does the person know what to do and how to do it?
- *Capacity:* Does the person have the physical and cognitive ability to perform?
- *Motivation:* Does the person want to perform the behavior?

Gilbert's insight was that environmental factors typically account for more performance variance than individual factors. A person with excellent skills but a hostile environment will likely fail. Success requires alignment between what the person brings and what the environment provides.

Gilbert's model has its critics. Rooted in behaviorist principles, it can be accused of oversimplifying human motivation, treating people as responders to environmental stimuli rather than meaning-making agents with values and identities. These critiques have merit. But for the practical question of why people don't do what they know they should, Gilbert's framework remains useful. It forces us to ask whether we're addressing the right barrier before assuming more education is the answer.

■ **Applying Gilbert to Prevention**

Gilbert's model helps explain why prevention requires multiple strategies.

Policy creates incentives and consequences: the environmental factors that reward desired behavior and punish undesired behavior. Laws against impaired driving, penalties for violations, and policies that restrict alcohol availability all shape the environmental support for sober driving.

Enforcement makes those incentives real: it creates the actual risk of consequences that make the policy meaningful.

Technology provides resources and tools: rideshare apps, interlocks, breath testing devices that help people enact their intentions.

Education builds the individual repertory: the knowledge, skills, and motivation that the person brings to the situation.

**“ Without environmental supports,
even well-motivated individuals may fail. ”**

Without environmental supports, even well-motivated individuals may fail. A person who knows impaired driving is dangerous and is motivated to avoid it may still drive impaired if there’s no alternative transportation and no perceived risk of enforcement.

Without individual repertory, even supportive environments won’t produce the desired behavior. A person surrounded by available alternatives and strong enforcement may still drive impaired if they don’t recognize their impairment, don’t value safety, or don’t know how to access alternatives.

Complete prevention requires both.

■ **Project Green Yellow Red: Gilbert’s Model in Action**

In 2005, I had the opportunity to apply Gilbert’s model directly when I was awarded a contract from the National Highway Traffic Safety Administration to create a demonstration project addressing impaired motorcycle riding. The project, which I called Project Green Yellow Red, illustrates why diagnosing the real barrier matters more than assuming the problem is always about education.



Randy Wiessinger, then a motor officer deputy sheriff with the Dane County Sheriff's Office, displays the Project Green Yellow Red banner at a motorcycle rally. The program's slogan—"Free to Ride, Free to Choose"—emphasized rider autonomy while providing a safe alternative.

The issue was weekend riders who chose to drink and ride. These weren't uninformed people who didn't understand the risks. They knew drinking and riding was dangerous. They'd heard the statistics. Many had friends who'd been hurt or killed. The individual repertory (knowledge of risk) was already there.

So why did they keep doing it?

A facilitated focus group with riders revealed the real barrier: they didn't want to leave their motorcycles behind at the tavern. They were more concerned about someone messing with their bike overnight than about being involved in a crash. The risk of theft or vandalism felt immediate and certain. The risk of a crash felt abstract and probabilistic.

This was a Gilbert insight. The problem wasn't individual repertory; they already knew the risk. The problem was environmental: there was no secure way to leave the bike. No amount of education about motorcycle crash statistics would solve this. They needed resources and tools that didn't exist.

So we created them. We purchased twenty-foot shipping containers, cut them in half to create ten-foot storage units, and designed them to look like a biker's garage. Each shelter could securely store motorcycles overnight. The project deployed these shelters at seven rural taverns in Dane County, Wisconsin, that agreed to participate.



A single-motorcycle shelter branded with the Project Green Yellow Red logo. In addition to the larger multi-bike storage containers, the program explored individual shelter designs to expand secure overnight storage options.

The color coding gave the project its name. Green meant no alcohol—ride safely. Yellow meant some alcohol—consider your options. Red meant .08 BAC or above—park your bike and get a ride. The colors

appeared throughout the campaign materials and on the shelters themselves.

But the most memorable element was the point-of-decision prompt. I installed motion-activated devices in the men's restroom urinals at participating taverns. When activated, a recorded voice said: "Hey, you, have you been drinking and plan to ride? Your future is in your hands. Park your bike and get a ride instead. Talk to your bartender to secure your bike in the Green Yellow Red shelter, where it will be kept safe until you claim it."

The message caught riders at exactly the moment when the decision became salient—when they were thinking about leaving. And it offered an immediate solution: talk to your bartender. Riders could either arrange a ride home on the spot or call ahead to book their space in the shelter. The bartender facilitated both the storage and the alternative transportation.

The results demonstrated that the concept worked. All seven sites consistently booked their shelters, with many bikers calling in advance to reserve their spot. The logs showed steady, enthusiastic participation. At least one other state subsequently adopted the model.

What made Project Green Yellow Red successful was the diagnosis. If I had approached this as an education problem (if I had created pamphlets about motorcycle crash statistics or run awareness campaigns about the dangers of impaired riding), I would have been building individual repertory that was already sufficient. The riders knew the risk. They needed environmental support: secure storage and a convenient alternative.

Gilbert's model provided the framework for seeing this clearly. Sometimes the barrier is knowledge, and education is the answer. Sometimes the barrier is motivation, and persuasion is the answer. But sometimes, as with the weekend riders, the barrier is environmental,

and the answer is resources, tools, and infrastructure that make the safe choice possible.

Complete prevention requires diagnosing which barrier you're actually facing.

■ **The Special Role of Knowledge**

In Gilbert's model, knowledge appears in both categories. There's informational support in the environment—signs, instructions, feedback that tell people what to do. And there's knowledge in the individual repertory—what the person has learned and internalized.

Environmental information and individual knowledge serve different functions. Environmental information is available when the environment provides it. A sign telling you to designate a driver is useful when you see it. A warning from your car is useful when you're in the car. Individual knowledge is available whenever you need it. What you've learned about impairment, what you understand about risk, what skills you've developed for managing situations—all of this is available regardless of what the environment provides.

This is another way of describing the portability of internalized judgment. Education builds the individual knowledge that travels with the person, independent of environmental supports.

This doesn't mean environmental information is unimportant—it's very important. Point-of-decision prompts, warning labels, and situational reminders can all influence behavior. But these environmental information sources are only present sometimes. Individual knowledge is present always.

■ **Integrating the Models**

Let me now pull together the frameworks we've explored. McGuire's model shows us that attention is the gate—nothing happens until you get through it. Fishbein's model shows us that behavior flows from intention, which flows from attitudes, norms, and self-efficacy—all of

which education can influence. Gilbert's model shows us that behavior requires both environmental support and individual repertory—and that education builds the individual repertory that travels with the person.

Together, these models suggest a sequence:

Engagement tools capture attention, opening the gate.

Educational content builds knowledge, shapes attitudes, corrects norm misperceptions, and develops skills.

These internal changes, combined with environmental supports, enable behavioral intention and actual behavior.

Sustained effort reinforces the internal changes and maintains alignment with environmental supports.

No single step is sufficient. But each step is necessary. And the first step—capturing attention—is what engagement tools are designed to do.

PART FOUR

MAKING THE INVISIBLE VISIBLE

CHAPTER 10

The Power of Experiential Learning

Not all education is created equal. Some educational approaches are more effective than others at capturing attention, creating understanding, and producing lasting impact.

Experiential learning (learning through direct experience rather than just instruction) has particular power in prevention education.

■ What Makes Experiential Learning Different

Traditional didactic education (teaching by telling through lectures, readings, and information delivery) engages primarily cognitive processing. The learner receives information, processes it intellectually, and stores it in memory.

Experiential education engages more systems. It involves the body as well as the mind. It creates emotional responses as well as cognitive ones. It produces memories that are episodic (“I remember what happened”) as well as semantic (“I know this fact”).

Consider the difference between being told that alcohol impairs coordination and experiencing impaired coordination. The information is the same. But the experience creates something the information alone cannot: a felt sense of what impairment is like.

That felt sense matters because many prevention decisions involve embodied states. When you’re deciding whether to drive after drinking, you’re not primarily accessing abstract knowledge about blood alcohol levels. You’re assessing how you feel. And your feeling may be misleading: impairment affects the very cognitive functions needed to detect impairment.

Experiential education creates a reference point. Someone who has experienced simulated impairment knows what it feels like to think they're fine while failing basic tasks. That knowledge is visceral, not just intellectual. And it's available as a comparison point when they're assessing their own state.

■ **The Invisibility Problem**

Many things that prevention education tries to address are invisible.

Impairment is invisible. The dangerous thing about impairment isn't that you feel nothing; it's that you can't accurately judge how impaired you are. You might feel 'a little buzzed' without realizing your reaction time has slowed significantly or your judgment is compromised. And judgment is one of the first things to go, which means the more impaired you are, the less capable you are of recognizing it.

Risk is invisible. You can't see the statistical probability of a crash. You can't perceive the counterfactual harm of driving that didn't happen because you made a different choice.

Future consequences are invisible. You can't see the injury, the death, the legal consequences, the family devastation that might result from a choice not yet made.

This invisibility is a fundamental challenge for prevention. How do you help people understand things they cannot see?

One answer is experiential tools that make the invisible visible.

Simulation goggles make impairment visible, or rather, they make its effects experienceable. You can see (or fail to see) what impaired vision is like. You can feel what impaired coordination is like. The invisible becomes tangible.

One prevention educator captured the difference simply: “It’s not we’re telling you [that] you can’t function. We’re showing you [that] you can’t function.” That distinction—between telling and showing—is the heart of experiential learning.

**“ It’s not we’re telling you [that] you can’t function.
We’re showing you [that] you can’t function. ”**



An early Fatal Vision demonstration from the late 1990s. A participant wearing simulation goggles attempts to navigate a cone course on a bicycle while a law enforcement officer observes. This indoor demonstration—conducted years before pedal carts became standard equipment—illustrates the core principle of experiential education: showing rather than telling. The observer learns vicariously while the participant discovers firsthand that “feeling fine” doesn’t mean functioning normally.

A prevention specialist who worked with military personnel described how she used Intoxiclock—a software tool that calculates blood alcohol content based on personal inputs and dynamically shows how BAC rises and falls over time. She would have service members enter their actual weight, gender, and what they typically drank, then use Intoxiclock to show them their estimated BAC. “They would tell me, ‘That was me last weekend at the bar, and I thought I was fine to drive. But you’re telling me that I was over.’ And I said, yes. If you had been pulled over and stopped by the police, you could have gotten a DWI or much worse. And their eyes would get enormous. And they’re like, ‘I can’t believe that. I’m not going to ever do that again.’”

That moment—when the eyes get enormous, is what experiential tools create. It’s the moment when abstract information becomes personal reality. No lecture produces that response.

■ **Why Educators Choose These Tools**

In the final years of my doctoral work, we partnered with Innovation Research & Training (IRT), a behavioral sciences research company with decades of experience developing evidence-based prevention curricula funded by NIH and other federal agencies, to commercialize an e-learning platform they had developed. Our sales team, our customer relationships, a solid research-based product addressing a genuine need. The goggles moved; the e-learning platform didn’t.

This puzzle gave my research a new dimension. My survey responses from 176 traffic safety educators and interviews with 18 practitioners helped me understand not just how to defend experiential tools, but why physical demonstration tools achieve adoption where digital alternatives struggle.

When I asked educators and advocates what mattered most in their decision to adopt a tool, two factors dominated: participant engagement and live demonstration capability. Not cost. Not ease of

use. Not even organizational recommendations. What mattered was whether they could see the tool working.

This makes sense once you understand how adoption decisions happen. When you demonstrate simulation goggles, administrators watch students stumble, laugh, and engage. The value is visible in real time. When students complete an online module, the learning may occur, but decision-makers see only students clicking through screens.

The insight is this: participant engagement is how value becomes visible for experiential tools. You can't see learning happening inside someone's head. You can't directly observe attitude change. But you can see participant engagement: the struggles, the laughter, the questions, the conversations that follow. That visible engagement is what convinces educators to adopt, administrators to fund, and participants to take the experience seriously.

This explains a challenge for the adoption of e-learning tools. Engagement happens on a screen, invisible to decision-makers. The valued outcomes may be real, but they're not observable in the same way. For digital tools to succeed, they need to find ways to make their valued outcomes visible, through completion dashboards, assessment results, or integration with in-person facilitation.

■ **Three Functions of Experiential Tools**

Beyond the general frameworks we've discussed, experiential tools serve three specific functions worth naming.

■ **Function One: Attention Capture**

Experiential tools capture attention in ways that didactic approaches cannot.

A lecture about impaired driving fades into the background of everything else students have heard about impaired driving since childhood. A goggle demonstration breaks through. It's novel. It's physical. It's surprising. It generates curiosity and emotional response.

This attention capture function is especially valuable with resistant or disengaged audiences. Young people who have tuned out conventional prevention messages will still engage with an experiential activity. The tools reach people that other approaches miss.

A veteran highway safety director described the attention environment educators now face. He noted that Mattel has rewritten classic board games like Sorry and Clue to play faster because children lose interest before the original versions end. “We have about the length of the start of a TikTok to get their attention,” he observed, “or they’re moved onto the next thing.” The challenge isn’t that young people are incapable of focus; it’s that everything in their world competes for it. A lecture asking them to simply listen is fighting a losing battle.

“

**We have about the length of the start
of a TikTok to get their attention,
or they’re moved onto the next thing.**

— Highway safety director

”

A prevention coordinator in Connecticut described watching middle schoolers encounter simulation goggles at a club fair: “It always intrigued me that children were drawn to these, because they always thought they could beat them. They thought they could beat them, because they watched the kid before them, and they’d say, okay, he’s throwing to the left, so I’m going to throw to the right. They always thought they could beat them, and they never did.”

That competitive impulse—“I can beat this”—is itself a form of engagement. The kids aren’t tuning out. They’re leaning in, trying to outsmart the tool. And when they fail, the lesson lands. The discovery is theirs.

■ **Function Two: Empathy Building**

Recent research has identified another function of simulation tools: building empathy and perspective-taking.

In 2024, Dr. Kathryn Hardin and colleagues at Metropolitan State University of Denver published research on using our Fatal Vision concussion simulation goggles to train speech-language pathology students who would be treating patients with traumatic brain injuries.

The problem they were addressing is that patients with TBI often report that their healthcare providers “lack necessary knowledge” and “do not seem to understand what living with TBI is like.” Providers may have clinical knowledge but lack experiential understanding of what their patients experience.

Hardin’s team used our simulation goggles to let students experience symptoms like what TBI patients report: visual disturbances, difficulty concentrating, impaired coordination. The experience helped students build cognitive empathy: the ability to understand another person’s perspective.

■ **Function Three: Relationship Building**

In my doctoral research, educators consistently reported that experiential tools facilitated relationship-building with their audiences.

A goggle demonstration creates shared experience. Everyone watches the volunteer try to walk a straight line. People laugh. They try it themselves. They talk about it afterward. The experience creates connection between the educator and the group, and among group members.

This matters because influence often flows through relationships. An educator who is seen as relatable, engaging, and trustworthy has more impact than one who is seen as distant or boring. Experiential tools help educators build that relational capital.

A traffic safety coordinator working with a tribal community described this transformation vividly. Before using experiential tools, she was anonymous—“the police officers and the safety people.” Students

would see her coming and think, “oh, no, not her again.” Now? “The kids come up to you and say, hey, when are you coming to the school again?” The tools didn’t just capture attention; they changed the relationship. She went from authority figure delivering unwanted lectures to someone the students wanted to see.

“

**The kids come up to you and say, hey,
when are you coming to the school again?**

—Traffic safety coordinator

”

■ **Beyond Scaring Kids Straight**

Critics sometimes characterize experiential tools as “scare tactics,” attempts to frighten people into behavior change. This characterization misunderstands what the tools do and why they work.

Simulation goggles don’t work primarily through fear. They work through insight. When someone puts on goggles and realizes that they can’t do simple tasks they normally do easily, the response is usually surprise, not terror. “I had no idea it would be this hard” is the typical reaction.

That insight is valuable regardless of whether it produces fear. It creates understanding that was not there before. It provides a reference point for future decision-making. It opens a conversation that the educator can build on.

This reframing matters strategically. When critics evaluate experiential tools as behavior modification interventions, asking whether they produce lasting behavior change, the tools will often appear to fall short. But that framing misunderstands what the tools do. Experiential tools are better understood as catalysts for emotional insight and engagement. They create the conditions under which learning, empathy, and relationship-building can occur. Evaluated on those terms, the evidence strongly supports their value.

PART FIVE

BUILDING COMPREHENSIVE PROGRAMS

CHAPTER 11

Integration, Not Isolation

As we saw in Chapter 1, the four leverage points don't just coexist; they actively strengthen each other. This integration principle has practical implications for how we design programs.

Too often, experiential tools are used in isolation. An educator does a goggle demonstration, then moves on to the next thing. There's no follow-up, no reinforcement, no connection to other program elements.

That isolation is a mistake. The tool creates an opening, and then nothing walks through.

■ Designing for Integration

To be clear: experiential tools and multi-week evidence-based e-learning platforms serve different functions. An evidence-based e-learning platform is designed to build skills over time through repeated exposure and practice. Simulation goggles aren't a replacement for that; they can serve as a catalyst for it. The tools capture attention and create readiness; the e-learning platform does the sustained work of skill-building and reinforcement. The question isn't which approach is better. The question is how they fit together.

Effective integration means several things.

First, position engagement tools at the start. Use experiential activities to capture attention at the beginning of a program or curriculum. Create the opening first, then build on it.

Second, connect the experience to content. After a goggle demonstration, don't just move on. Discuss what happened. Link the

experience to information about how impairment works. Help participants understand the science behind what they felt.

Third, build skills on the foundation. Once attention is captured and understanding is built, move to practical skills. How do you estimate your own impairment? How do you plan for safe transportation? How do you intervene when a friend is about to drive impaired?

Fourth, reinforce over time. Create multiple touchpoints that return to the themes introduced by the experiential activity. Reference the experience weeks or months later: “Remember what it felt like to try to walk in those goggles? That’s why we’re talking about designated drivers today.”

Fifth, connect to other strategies. Help participants understand how education connects to policy, enforcement, and technology. Explain why the laws exist, what enforcement looks like, what technological tools are available. Create a coherent picture of prevention.

A traffic safety coordinator in North Dakota runs an event called “Driving Skills for Success” that illustrates what comprehensive integration looks like. She brings together twelve to fourteen interactive stations: a rollover simulator, a motorcycle simulator, snowplows where kids can see the complexity of the controls, semi trucks surrounded by cars that disappear when viewed from the cab. Driver’s ed teachers demonstrate parallel parking. U-Haul representatives teach trailer backing. A mechanic shows how to check fluids and change a tire. Law enforcement officers discuss what happens if you get pulled over.

The favorite station? Distracted driving. Students drive through a cone course with a law enforcement officer beside them, then do it again while reading and responding to a text. “I want them to realize that you cannot stay in your lane, that you weave out.” Parents attend too, sitting in the back seat. “They have the best time. But they get out and say, ‘Oh my God, that’s so scary.’ And I say, yes—and that’s at low speeds.”

Notice what this event does. It doesn't rely on any single tool. It creates multiple experiential touchpoints, connects them to practical skills, involves parents, and embeds the prevention message in a broader context of vehicle safety and responsible driving. The goggles and simulators are part of the system, not the whole system.

■ **The Implementation Gap**

One of the strengths of experiential tools is their flexibility. Fatal Vision Goggles can be used in a high school health class, at a community fair, during a corporate wellness event, or as part of a court-mandated program. They adapt to any setting, any audience, any time frame.

But this flexibility has a shadow side.

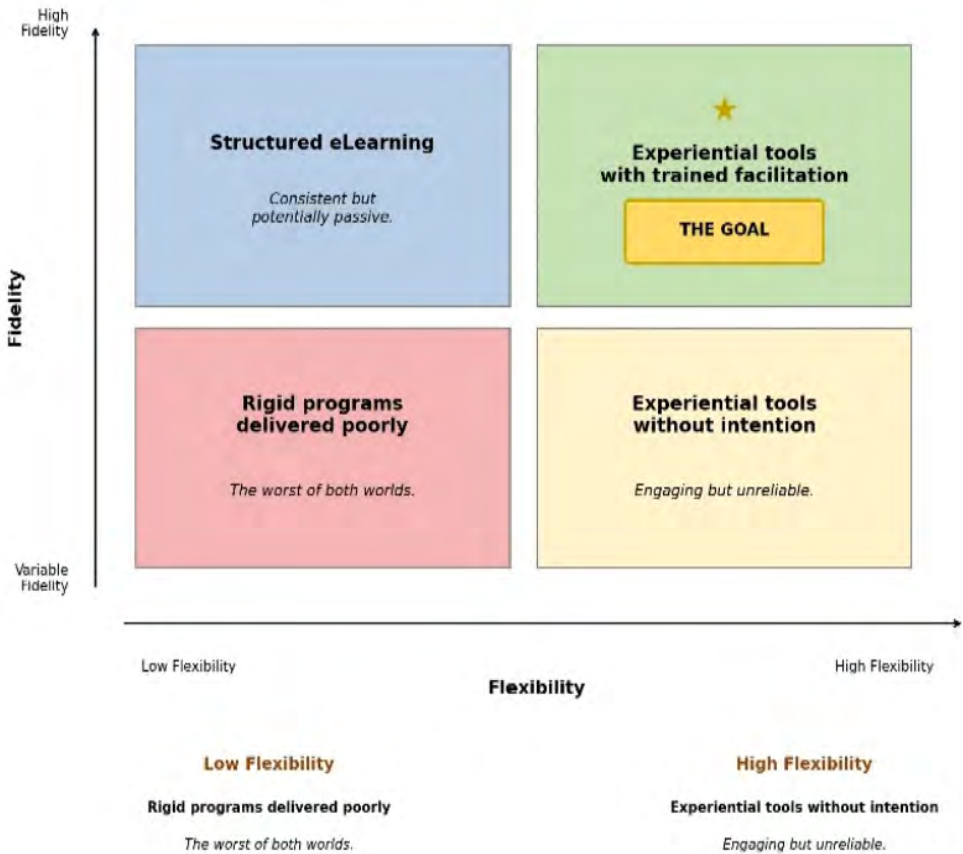
A tool that can be used anywhere can also be used poorly anywhere. A quick "try these goggles" demonstration with no debrief, no context, and no follow-up message may entertain participants without teaching them anything. The experience becomes a novelty rather than an insight. The engagement happens, but nothing is built on it.

If this is how experiential tools are sometimes used, and it is, then critics who say the tools "don't work" may be observing real failures. They're just misattributing the cause. The failure isn't in the tool; it's in the implementation.

■ **The Flexibility-Fidelity Tradeoff**

It helps to think about educational interventions along two dimensions: flexibility and fidelity (see Figure 1). (Note: The "flexibility" dimension in Figure 1 corresponds to what SAMHSA's Strategic Prevention Framework calls "adaptation"—the degree to which a program or practice is changed to meet the unique needs and characteristics of the target audience. SAMHSA emphasizes that implementation requires "balancing fidelity and adaptation," which is precisely the tradeoff this framework illustrates.)

FIGURE 1: The Flexibility-Fidelity Matrix



Structured eLearning platforms sit on one end of the spectrum. They're lower flexibility: you need a computer, an internet connection, and time to complete the modules. But they're high fidelity: every user gets the same content, the same sequence, the same knowledge checks. The message is consistent, and well-designed platforms build in interactivity that sustains engagement.

Experiential demonstration tools sit on the other end. They're high flexibility: you can bring them anywhere, adapt them to any audience, use them in five minutes or fifty. But their fidelity depends entirely on

the facilitator. A skilled educator who debriefs the experience, connects it to key messages, and integrates it into a larger program can create powerful learning moments. An untrained user who treats it as entertainment creates a fun activity that changes nothing.

Each approach has trade-offs. The goal is to match the tool to the context, and when possible, combine them: use experiential tools to capture attention and create openings, then reinforce with structured content that builds knowledge over time.

■ The Role of Skilled Facilitation

This is why facilitation matters, and why it's often undervalued.

“ An experiential tool in the hands of a skilled facilitator becomes an engine for internalized judgment. The facilitator doesn't just run the activity; they harvest the insight. ”

An experiential tool in the hands of a skilled facilitator becomes an engine for internalized judgment. The facilitator doesn't just run the activity; they harvest the insight. They ask the right questions: “What surprised you? What did you expect to happen? What does this tell you about how impairment actually works?” They connect the experience to the key message: “Remember that feeling of being confident while failing? That's what ‘I feel fine’ actually means.”

Research on persuasion and belief change explains why this questioning approach works. Asking questions reduces defensiveness in ways that giving answers cannot. Instead of telling participants, “here's why you're wrong about your ability to drive after drinking,” skilled facilitators prompt reflection: “What did you notice about your performance? How did that compare to what you expected?” This Socratic approach leads people to discover insights for themselves, which makes those insights more durable and less threatening to identity.

■ Distinguishing Experience from Spectacle

There's another implementation issue worth addressing: the confusion between experiential insight and emotional spectacle.

Mock crashes (staged scenes with wrecked cars, simulated injuries, and emergency response) are sometimes confused with experiential learning tools, but they work through fundamentally different mechanisms.

Mock crashes rely on fear appeals: showing audiences dramatic consequences from the outside. Research has consistently found this approach ineffective and potentially counterproductive. Studies show mock crashes do not lead to positive behavior change, may actually increase risky behavior, are least effective among those who most need to change, and can create psychological trauma, particularly for students who have experienced similar real-world events.

Simulation goggles are categorically different. They don't show you what happens to other people in crashes; they reveal something about yourself. The experience is personal, not observational. The typical response is surprise and insight ("I had no idea it would be this hard"), not fear.

This distinction matters. Critics who lump simulation goggles together with mock crashes and other fear-based tactics are conflating fundamentally different approaches. Mock crashes say: "Look what could happen to you." Simulation goggles say: "Look what's already happening inside you." One relies on spectacle and external consequences. The other creates personal insight through direct experience. Dismissing both as "scare tactics" misunderstands how experiential learning actually works.

CHAPTER 12

Defending Your Work

I want to close this section with some direct guidance for educators who face questions about whether their work matters. If you've been told that experiential tools "don't work" or that education is ineffective, here's how to respond.

■ Know Your Critics

The criticism has specific sources:

- The Washington State Health Care Authority's guide "Prevention Tools: What Works, What Doesn't"—developed by Joe Neigel of the Monroe Community Coalition and hosted on the Athena Forum—lists simulation goggles under strategies that don't work, claiming "there is zero evidence that fatal vision goggles decrease drunk driving."
- Prevention First, an Illinois-based organization, published a 2010 report reaching similar conclusions, and in October 2024 released an updated paper titled "Effectiveness of Vision Impairment Goggles in Youth Alcohol and Other Drug Prevention" concluding that "Fatal vision goggles have been found ineffective in producing lasting behavior change" and that "the absence of significant knowledge or behavior change suggests that FVGs are ineffective in preventing future alcohol and other drug use."
- Prevention Solutions@EDC presents "drunk goggles" in trainings on ineffective strategies, calling them tools with "little to no long-term impact." The critique has been repeated across PTTC presentations.

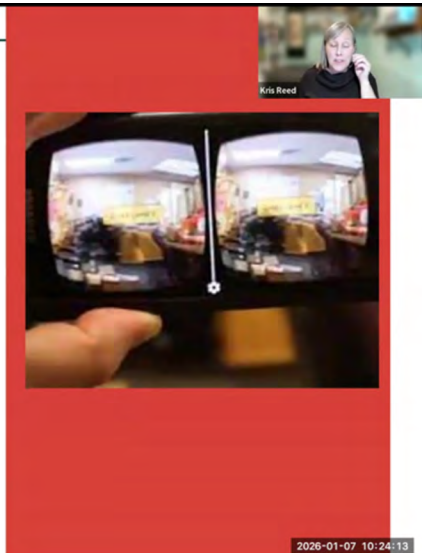
- The Pacific Southwest PTTC featured a 2022 webinar by Pam Tindall and Rick Collins titled “What Does NOT Work in Prevention,” and most recently,
- The Great Lakes PTTC’s January 2026 webinar by Kris Reed titled “Uncovering What Does NOT Work in Substance Misuse Prevention” that placed simulation goggles in the same category.

The arguments in these presentations are worth examining. Critics argue that drunk goggles have “little to no long-term impact,” that “research has shown no evidence of effectiveness,” and that they’re “often part of one-time events.” They note that students find the experience “fun” and “funny,” and recount hearing that some kids discovered if you “close one eye” you can navigate the obstacles more easily. “What kind of lessons are we teaching them?” one presenter asked. “Are we teaching them ways to get around the impact of drinking or driving under the influence?”

Ineffective:

“Drunk” Goggles^{6,7}

- Little to no long-term impact
- Research has shown no evidence of effectiveness
- Often part of one-time events



A slide from the Great Lakes PTTC’s January 2026 webinar “Uncovering What Does NOT Work in Substance Misuse Prevention.” The claim that “research has shown no evidence of effectiveness” omits what the cited studies actually found: significant effects on knowledge, attitudes, and intentions.

The citations, 6 & 7, referenced on the slide deserve scrutiny. One is a dissertation—not research published in a peer-reviewed journal. The other is Jewell & Hupp (2005), a peer-reviewed study that actually found significant positive effects: participants who wore the goggles showed greater declines in favorable attitudes toward drinking and driving than control groups. The study also found that effects faded after four weeks without reinforcement—a program design consideration, not a tool failure. This research somehow becomes evidence of “no effectiveness.”

The peer-reviewed literature critics don't cite tells the same story. Jewell, Hupp & Luttrell (2004) found that experiential use of the goggles produced significantly greater attitude change than merely watching others. Hennessy, Lanni-Manley & Maiorana (2006) found that the goggles reduced drinking and driving intentions, with stronger effects among heavier drinkers—precisely the at-risk population prevention aims to reach. These are exactly the categories of outcomes SAMHSA recognizes for evidence-based programs: attitudes, intentions, and risk perception.

Each of these points reveals the flawed framework. The “one-time events” critique targets how some educators deploy the tool, not whether the tool works. That's like criticizing a textbook because some teachers only assign one chapter. Engagement is the prerequisite for learning, not the enemy of it. Yet the observation that kids find it “fun” and “funny” is presented as a flaw. Every behavioral model from the Health Belief Model to the Integrative Model recognizes that capturing attention is the first step. As for the “close one eye” workaround—a skilled educator turns that moment into the lesson: “Great, now try walking the line with two eyes closed. Think you'd be able to drive a car like that?” The tool didn't fail. The conversation just got more interesting.

Notice the framing throughout. The critics evaluate simulation goggles by whether they “decrease drunk driving”—a distal behavioral

outcome. By that standard, of course the tools fall short. A spark plug doesn't drive a car either. The question isn't whether a single demonstration changes behavior months later. The question is whether the tool captures attention, creates insight, and opens a window for the educator to build on. On those measures—the proximal outcomes the tools are designed to produce—the peer-reviewed research consistently shows positive effects. The critics draw the opposite conclusion because they're asking the wrong question.

“ The question isn't whether a single demonstration changes behavior months later. The question is whether the tool captures attention, creates insight, and opens a window for the educator to build on. ”

If the standard is registry-listed, evidence-based programs evaluated through randomized controlled trials for long-term behavioral outcomes, then many respected approaches fall short, not because they don't work, but because the framework doesn't fit. Ford Driving Skills for Life, backed by more than \$60 million in cumulative investment since 2003, has operated in all 50 states and 46 countries in partnership with the Governors Highway Safety Association. The program built its impaired driving education around experiential simulation. They've developed drunk driving suits, drugged driving suits, and hangover suits, all designed to let participants experience impairment in a safe setting. The program has trained over 1.25 million young drivers since 2003 and is celebrated by state highway safety offices nationwide. Yet Ford DSFL isn't on any evidence-based registry. It's not a manualized curriculum. It's hands-on experiential education, the same approach that Fatal Vision pioneered and that some critics now dismiss. Both use experiential simulation to make impairment visible. Both lack Randomized Control Trials proving long-term behavior change. Both are important for opening people's eyes to the dangers of impaired driving.

It's worth noting that SAMHSA discontinued its National Registry of Evidence-based Programs and Practices (NREPP) in 2018. The registry that defined "evidence-based" for a generation of prevention professionals no longer exists. Critics who ask whether a tool is "evidence-based" are appealing to a standard that SAMHSA itself has moved away from.

■ **The Reframe**

When someone says your tools don't work, the first question to ask is: what are you expecting the tool to do?

If they're asking whether a five-minute demonstration permanently changes behavior, no, and nothing else does either. If they're asking whether the demonstration captures attention, creates engagement, and opens a conversation that educators can build on—absolutely.

The reframe shifts the conversation from "does it work?" to "does it do what it's designed to do?" This is a more productive question because it leads to a discussion of appropriate expectations and integrated programming.

“ **The reframe shifts the conversation from “does it work?” to “does it do what it’s designed to do?”** ”

Put differently: experiential tools are catalysts for emotional insight, not behavior modification devices. They create openings (moments of attention, curiosity, empathy, and connection) that skilled educators can build upon. Asking whether a catalyst produces the final reaction misunderstands what catalysts do. They lower the activation energy. They make the reaction possible. What happens next depends on what follows.

■ **The Counter-Question**

A powerful response to criticism is the counter-question: "What evidence-based tool are you using now, and how are you evaluating the results?"

This reframes the conversation. Critics holding experiential tools to an RCT standard for long-term behavioral change often aren't applying that same standard to their own approaches. Most curriculum-based programs are evaluated on the same proximal outcomes—knowledge, attitudes, intentions—where the peer-reviewed research on Fatal Vision Goggles shows positive effects.

If someone can demonstrate their approach produces better outcomes, great. But holding one tool to a standard that no tool meets—while giving a pass to alternatives— isn't rigorous evaluation. It's a double standard.

■ **The Evidence Clarification**

Critics often appeal to “evidence-based” standards. The right response is to clarify what the evidence shows.

The evidence shows that experiential tools capture attention and create engagement. The evidence shows that they produce short-term attitude change. The evidence shows that these effects fade without reinforcement.

The evidence does not show that experiential tools are useless. It shows that they serve proximal functions and that distal outcomes depend on program design. That's a different story than “doesn't work.”

I'll be direct: the peer-reviewed evidence base specifically on simulation goggles is smaller than I wish it were. Three studies (Jewell, Hennessy, and colleagues) show effects on attitudes and intentions. That's not nothing, but it's not a mountain of RCTs either. I believe the theoretical grounding, the alignment with established learning science, and three decades of practitioner experience justify continued use. But I also believe we need better evaluation methods that can capture what these tools contribute without demanding that they demonstrate outcomes only comprehensive programs can achieve. That work remains to be done.

The evidence-based movement is valuable, but it's sometimes misapplied. The misapplication is demanding that individual components, like a goggle demonstration, demonstrate behavior change, rather than assessing whether they perform their intended function within a larger system. That's like demanding a spark plug drive a car. Evidence-based design matches interventions to their appropriate outcomes and builds systems that achieve ultimate goals.

There's another issue: fidelity. Evidence-based programs produce their documented outcomes when implemented as designed. In the real world, educators adapt, abbreviate, and modify. A program that showed results in a controlled study may not show the same results when delivered in 30 minutes instead of six sessions, or by untrained staff, or without the follow-up components. The evidence-based label tells you what's possible under ideal conditions, not what will happen in every implementation.

■ **The Laughter Problem**

Critics sometimes dismiss experiential demonstrations because participants laugh. The assumption is that laughter signals entertainment, not education, that if students are having fun, they must not be learning.

This inverts the relationship between laughter and learning.

Laughter during a goggle demonstration is a sign of surprise. The participant expected to walk a straight line and couldn't. Their prediction about their own capability was violated. That gap between expectation and reality, is precisely where insight happens.

Neuroscience confirms what facilitators observe: surprise enhances memory formation. We remember things that contradicted our expectations far better than things that confirmed them. The student who laughs while stumbling through a simple task is encoding a memory that will surface later, in a real situation, when it matters.

The question isn't whether participants laugh. The question is what happens next. A skilled facilitator uses that moment, when attention is high and defenses are low, to deepen the lesson. "You're laughing now. But imagine if that were a real intersection." The laughter becomes a bridge to reflection, not a substitute for it.

If a demonstration produces only laughter and nothing else, that's not a failure of the tool. It's a failure of facilitation. The tool did its job: it captured attention and created surprise. What the facilitator does with that opening determines whether the moment becomes insight or just entertainment.

A law enforcement trainer who runs prevention programs made this point vividly: "Some of them aren't as passionate as some of us are about these programs. The way I used to run the program was a two-day, one-day classroom, second day was a driving simulator. And I had the school resource officer teach the class. It was a 45-minute lesson plan. He was done in 15 minutes."

Same tool. Same lesson plan. Radically different results. The difference was the facilitator. Critics who observe poor outcomes from experiential tools may be observing real failures, but attributing them to the wrong cause.

■ **For SAMHSA-Aligned Settings**

If you work in prevention settings aligned with SAMHSA, CADCA, or similar organizations, you may need more detailed guidance on positioning experiential tools within evidence-based frameworks. Appendix A provides that guidance, including how experiential tools target the same mediating variables that SAMHSA-recognized programs target, the peer-reviewed research that does exist, and ready-made responses to common objections. The short version: SAMHSA's own framework emphasizes that "interventions should not be considered in isolation" and calls for comprehensive, multi-level strategies. Experiential engagement tools are the component that creates openings in contexts where sustained curricula don't reach.

■ The Portability Argument

Finally, you can make the portability argument: Internalized judgment is the only intervention that travels with the person into every decision moment.

Policy sets rules but isn't present in the moment. Enforcement creates risk but is episodic. Technology provides tools but is situational. Only education shapes the judgment of the person who faces the decision.

This doesn't mean education is better than other strategies. It means education does something different that can't be replaced. Abandon education and you lose the portable intervention: the one that's there when everything else is absent.

That's the argument in a nutshell. Internalized judgment is portable. Portable is essential. Therefore education, the thing that builds internalized judgment—is essential.

■ Standing Your Ground

I know it can be discouraging to hear that your work doesn't matter. I know it's frustrating when critics dismiss tools that you've seen engage and move people.

But the conversation has focused on the wrong questions and measures. Your work does matter. Engagement matters. Making the invisible visible matters. Creating portable understanding matters.

You build the portable intervention. Your work creates understanding that no checkpoint, app, or policy can replace. Keep doing it.

“

You build the portable intervention.

”

CONCLUSION

The Portable Intervention

I began this book with a question: What influenced your last health or safety decision when no one was watching?

I hope by now the answer is clearer. What was present in that moment was something you carried with you: understanding, values, knowledge, skills. Something portable. Something that traveled to the moment of decision when no law, officer, or device was there to influence you.

That's education. That's what it does: it builds internalized judgment. That's why it matters.

■ What We've Covered

In this book, I've argued that experiential engagement is the critical variable in prevention: the kind of engagement that captures attention through relevant experience, not just entertainment. It's what builds the internalized judgment that travels with the person into moments that other interventions cannot reach.

I've examined the prevention ecosystem, showing how policy, enforcement, technology, and education serve different functions and complement each other.

I've tackled the measurement problem, explaining why measuring engagement tools by behavior change outcomes is a category error, like asking whether a spark plug drives a car.

I've explored how behavior actually changes, drawing on McGuire's attention-as-gate insight, Fishbein's analysis of intention formation, and Gilbert's framework for understanding the interplay of environment and individual.

I've made the case for experiential learning, showing how physical demonstration tools make the invisible visible and create memories that stick.

I've shared findings from my doctoral research explaining why physical tools achieve adoption where digital alternatives struggle, and what that tells us about the value of visible engagement.

And I've provided practical guidance for building comprehensive programs and defending your work against criticism.

■ **What I Hope You Take Away**

If you remember only a few things from this book, I hope they are these:

Internalized judgment is portable. It's the only intervention that reliably shows up at the moment of decision. That portability makes it irreplaceable.

Experiential engagement is the starting point, not the finish line. Capturing attention through relevant experience is the gate through which influence must pass. Tools that create this kind of engagement serve an essential function even if they don't change behavior by themselves.

“

Discovery beats correction.

”

Discovery beats correction. People change their minds not when they're told they're wrong, but when they feel safe revising a belief. Experiential tools create conditions for self-discovery rather than imposing corrections. That's why they work when lectures don't.

“

Facts support change—they don't cause it.

”

Facts support change; they don't cause it. Truth matters, but persuasion is a social process, not a data transfer. Trust, relationships, and lived experience move people more than arguments alone.

Nothing works alone. Prevention requires comprehensive approaches that integrate multiple strategies. Education is necessary but not sufficient, and so is everything else.

Measure appropriately. Evaluate tools by what they're designed to do, not by what only complete programs can achieve. Don't demand that components accomplish what systems accomplish.

Design for the movable middle: the segment of the population that education and persuasion can impact. Persuasion research consistently shows diminishing returns at the extremes. The goal isn't universal conversion—it's reaching the undecided, the ambivalent, the lightly committed. Your tools may never reach true believers or hardened skeptics, but they can shift the people in between.

Law enforcement professionals see this clearly. The people they encounter repeatedly (the chronic offenders, the defiant, the addicted) are often beyond the reach of educational intervention alone. These are the outer rim, the population for whom deterrence, incapacitation, or treatment may be necessary. Prevention education is designed for the middle: the segment of the population that education and engagement can reach before behavioral patterns harden.

Facilitation matters as much as the tool. The same demonstration can produce insight or just entertainment, depending on what the educator does with the moment it creates. Laughter isn't failure; it's surprise, which is where learning begins. What happens next is what determines whether that moment becomes lasting understanding.

**“ Laughter isn’t failure—it’s surprise,
which is where learning begins. ”**

Your work matters. If you’re an educator using experiential tools, you’re creating openings that other approaches cannot create. You’re making the invisible visible. You’re shaping the portable intervention that travels with people everywhere they go.

While this book focuses on traffic safety, the principles of experiential engagement extend to substance abuse prevention more broadly. The same challenge exists: how do you make invisible consequences feel real to someone who hasn’t experienced them? A teenager who has never seen addiction up close may intellectually understand that drugs are dangerous, but that knowledge competes poorly against curiosity, peer influence, and the confidence of youth. Experiential tools that simulate impairment, whether from alcohol, cannabis, opioids, or other substances, create the same kind of visceral understanding that lectures cannot. The mechanism is identical: replace abstract warning with concrete experience. The discovery that your body doesn’t work the way you expect it to is powerful regardless of which substance caused the impairment.

The broader culture is moving in this direction. As one highway safety director observed: “Our culture is moving more and more to experiential education. Everything now is an experience, whether it’s how we consume information, how we consume news. So much is about entertaining us.” The question for prevention educators is whether we will lead this shift or be left behind by it.

**“ Our culture is moving more and more to
experiential education. Everything now is an
experience, whether it’s how we consume
information, how we consume news. ”**

An Invitation

I want to close with an invitation.

The conversation about education's role in prevention has become polarized. On one side are critics who say experiential tools don't work and should be abandoned. On the other side are defenders who sometimes oversell what education can accomplish.

I'm inviting a different conversation. A conversation about what engagement uniquely contributes. A conversation about how to measure appropriately. A conversation about integration rather than either/or. A conversation about building comprehensive approaches that use every available tool effectively.

Engagement isn't the whole answer. But it's the critical variable that makes everything else work. The question isn't whether to use experiential education; it's how to use it effectively.

“ The question isn't whether to use experiential education—it's how to use it effectively. ”

Internalized judgment is portable. Portable is powerful. And powerful is what prevention needs.

“ Portable is powerful. And powerful is what prevention needs. ”

A REVIEW

“Phenomenal. Revelational. I have been in law enforcement for four decades, with more than half of those years focused on traffic safety. I realized early in my career that enforcement was only part of the equation and became very involved in multiple educational efforts. After responding to and investigating countless traffic crashes, hundreds of which resulted in someone’s death or life changing serious injury, I became passionate about prevention. I have been involved in all of the ‘Four Leverage Points.’ I have personally struggled with the ‘Measurement Problem’ because I knew we could never measure the lives we saved, only the ones we didn’t. Dr. Aguilar’s book spoke directly to me, in multiple ways and on multiple levels. His research and this book ties everything I have been doing for decades together. ‘No single intervention works in isolation.’ ‘Each approach depends on an ecosystem that supports it.’ So yes, this book is revelational and phenomenal, and a must read!”

—Randy Wiessinger

WisDOT/BOTS Law Enforcement Liaison/Consultant

Wiessinger Consulting LLC

ACKNOWLEDGMENTS

This book represents the culmination of nearly three decades working in prevention education and sixteen years pursuing my doctorate. Many people contributed to both journeys.

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Finally, I want to acknowledge the prevention educators around the world who use experiential tools to make the invisible visible. You build the portable intervention. Your work matters more than the critics know.

ABOUT THE AUTHOR

Michael Aguilar, Ph.D. is the founder and CEO of Innocorp, Ltd., a company he started in 1996 and grew from a startup into a global provider of prevention education tools used in more than 100 countries. He created Fatal Vision simulation goggles after a near-miss tragedy involving an impaired driver in his neighborhood and has spent nearly three decades developing experiential tools that help people understand the effects of impairment, distraction, and concussion.

Under his leadership, Innocorp has expanded from its original Fatal Vision Goggles into a suite of research-based engagement tools supporting public health and safety educators worldwide. Dr. Aguilar has collaborated with national and state organizations including AAA, MADD, SADD, Boys & Girls Clubs of America, FCCLA, and the National Transportation Safety Board. He developed Project Green-Yellow-Red as a demonstration motorcycle safety initiative for the National Highway Traffic Safety Administration and created the “5=Zero in Wisconsin” motorcycle safety concept in coordination with the Blue Knights of Wisconsin and the Wisconsin Department of Transportation.

In 2025, Dr. Aguilar completed his Ph.D. in Mass Communication at the University of Wisconsin-Madison, where his dissertation research examined how and why prevention educators adopt certain tools over others. His sixteen-year doctoral journey, taking one class per semester while running his company, reflects his commitment to grounding practical prevention work in rigorous research.

Dr. Aguilar holds a Bachelor of Science in Computer Science from Missouri University of Science & Technology, an MBA in Marketing from St. Ambrose University, and his doctorate from UW-Madison.

He also holds the Distinguished Toastmaster designation from Toastmasters International, a recognition held by fewer than 12,000 of the organization's more than 4 million members.

He lives in Wisconsin with his wife of 47 years and regularly brags on his four grandchildren.

APPENDIX A

Positioning Experiential Tools Within SAMHSA's Framework

A Guide for Prevention Professionals in Evidence-Based Settings

If you work in substance abuse prevention, particularly in settings aligned with SAMHSA (the Substance Abuse and Mental Health Services Administration), CADCA (Community Anti-Drug Coalitions of America), or similar organizations, you operate in a professional culture with specific expectations about evidence and effectiveness. This appendix provides guidance on positioning experiential engagement tools within that framework.

I believe SAMHSA's own guidance supports the case for experiential tools. The key is understanding what their framework actually says, and what it doesn't say.

■ What SAMHSA Recommends

SAMHSA's evidence-based resource guides shape how many prevention professionals think about what “works.” Their 2020 guide *Reducing Vaping Among Youth and Young Adults* is instructive. The guide organizes interventions across three levels: individual, school, and community. It highlights several programs with research support:

- *smokeSCREEN*: A digital videogame requiring approximately three hours of gameplay across seven storylines, designed for curriculum integration.
- *CATCH My Breath*: A four-lesson school curriculum for grades 5-12, with each lesson running 30-40 minutes.
- *Media campaigns*: Including the FDA's “Real Cost” and Truth Initiative's “truth®” campaign.

Critics sometimes cite this guide to argue that only programs with randomized controlled trials deserve a place in prevention. But that's not what the guide says.

On pages 19-20, the guide states: "The interventions should not be considered in isolation. Decades of research show that the most effective prevention strategies are comprehensive and include interventions at multiple levels."

This is the integration principle I've argued throughout this book. SAMHSA isn't saying "only use evidence-based programs." It's saying comprehensive strategies require multiple components working together.

■ **Different Tools, Different Functions**

The programs SAMHSA highlights serve specific functions in specific contexts.

smokeSCREEN works through sustained digital engagement—seven storylines, three hours of gameplay, curriculum integration over multiple sessions. The documented outcomes are improved beliefs and knowledge about vaping and smoking.

CATCH My Breath works through structured classroom instruction—four lessons with peer-facilitated discussions and parent education components. The documented outcomes include reductions in vaping use, increases in knowledge, and improved perceptions of a vape-free lifestyle.

Media campaigns work through repeated exposure at population scale. The CDC estimates that with sufficient reach (75% of target audience) and sustained exposure, attitude shifts are expected in 12-18 months, and behavioral change within 18-24 months.

Notice what these approaches share: they're comprehensive, sustained, and multi-session. They work over time through repeated exposure and reinforcement.

Now consider the contexts where prevention educators actually work: The health fair booth where you have ten minutes with each group. The school assembly reaching hundreds of students in a single session. The community event where families drop in throughout the day. The brief classroom visit supplementing existing curriculum. The parent night where adults need engagement, not lectures.

These are settings where three-hour digital curricula don't fit. You need tools that create immediate impact, capture attention quickly, and open conversations that educators can build upon.

This is where experiential engagement tools belong—not as replacements for comprehensive programs, but as components that create openings in contexts where sustained curricula don't reach.

■ **The Adaptability Paradox**

Here's something worth understanding about why experiential tools rarely achieve formal "evidence-based program" status: the very adaptability that makes them valuable to practitioners creates structural barriers to standardized evaluation.

Evidence-based programs like CATCH My Breath can be evaluated because they have standardized protocols—specific lessons, specific content, specific sequence. Researchers can ensure fidelity to the intervention across multiple sites and measure outcomes consistently.

Experiential tools, by design, adapt to context. Fatal Vision Goggles might be used in a five-minute health fair demonstration, a fifty-minute classroom session with extensive debriefing, a court-mandated program for DUI offenders, or a corporate wellness event. The "intervention" is never the tool alone—it's the tool plus facilitation plus context plus follow-up. That combination varies enormously, making standardized evaluation difficult.

Asking whether simulation goggles "work" is like asking whether a whiteboard "works"—it depends entirely on what the teacher does with it.

This doesn't mean experiential tools lack research support. It means they occupy a different category than standardized curriculum programs—and should be evaluated accordingly.

■ **The Research That Does Exist**

Peer-reviewed empirical research on experiential tools like Fatal Vision Goggles does exist, grounding them in established behavioral theory.

Jewell (2004), published in the *Journal of Alcohol & Drug Education*, found that experiential use—actually wearing the goggles yourself—produces greater effects than merely observing others. This validates that embodied experience matters, not just watching a demonstration.

Jewell & Hupp (2005), published in *The Journal of Primary Prevention*, examined effects on attitudes and behaviors related to drinking and driving, demonstrating measurable attitude change from goggle demonstrations.

Hennessy, Lanni-Manley & Maiorana (2006), published in *The Journal of Drug Education*, found effects on drinking and driving intentions among college students. Critically, this study showed stronger effects for those who already drink more—meaning the tool has greater impact on the at-risk population, which is exactly what prevention aims to achieve.

■ **The Mediating Variables Argument**

This is the argument that matters most in SAMHSA-aligned conversations: experiential tools target the same mediating variables that evidence-based programs target.

Behavior change doesn't happen directly. It flows through mediating variables—the intermediate factors that research shows are necessary for behavior change to occur: Risk perception (Do I believe this behavior is harmful to me?), Knowledge (Do I understand what the risks actually are?), Self-efficacy (Do I believe I can refuse or resist?), Social norms (Do people like me avoid this behavior?), and Emotional salience (Will I remember this when it matters?).

Look at what SAMHSA's guide says about smokeSCREEN's outcomes (pages 20-21). The documented outcomes are “improved beliefs about nicotine vaping” and “improved knowledge about nicotine vaping.” Those aren't behavior outcomes—they're mediating variables.

smokeSCREEN is considered evidence-based because it shifts beliefs and knowledge, not because a three-hour videogame directly changes long-term behavior.

Experiential tools target those same variables through a different modality. The mechanisms differ—a videogame delivers content through narrative gameplay; simulation goggles create embodied experience—but the targets are the same.

This is the claim we can confidently make: experiential tools influence the conditions that research shows are necessary for behavior change.

We're not claiming a ten-minute demonstration changes behavior on its own. We're claiming it increases risk perception, builds knowledge, and creates emotional salience—the building blocks that comprehensive prevention depends on.

■ **The “Evidence-Based” Question**

When someone asks, “Is your tool evidence-based?” they're usually asking one of two different questions.

Sometimes they're asking: “Has this specific product been evaluated in randomized controlled trials with behavior change outcomes?” For most experiential tools, the honest answer involves the adaptability paradox discussed above—the tool's flexibility makes standardized evaluation structurally difficult, though peer-reviewed studies do demonstrate effects on attitudes, intentions, and risk perception.

Sometimes they're asking something broader: “Is there a reasonable basis for believing this approach contributes to prevention goals?” That's a different question, and the answer is clearly yes.

The distinction matters. “Evidence-based” has become a gatekeeping term in some prevention circles—a way to dismiss approaches that don’t meet a specific evidentiary standard. But that standard, applied consistently, would eliminate most of what prevention educators actually do. Few classroom activities, community presentations, or educational materials have been subjected to rigorous trials with long-term behavior outcomes.

The more productive framing is “evidence-informed”—grounded in established principles and research, designed to target factors that evidence shows matter, supported by peer-reviewed studies on proximal outcomes, even without product-specific RCTs demonstrating long-term behavior change.

This is intellectually honest. It positions experiential tools appropriately: as components of comprehensive strategies, not as standalone behavior-change interventions.

■ Responding to Common Objections

In SAMHSA-aligned settings, you may encounter skeptics. Here’s how to respond.

“That’s not evidence-based.”

“You’re right that we don’t have product-specific RCTs with behavior outcomes—though peer-reviewed studies by Jewell, Hennessy, and others do demonstrate effects on attitudes, intentions, and risk perception. The tool’s adaptability—which is what makes it valuable for health fairs, assemblies, and community events—also makes standardized evaluation structurally difficult. What we have is alignment with established research on experiential learning, risk perception, and the Health Belief Model. SAMHSA’s framework calls for comprehensive, multi-level strategies. We’re the engagement component that creates openings in contexts where curricula don’t fit.”

“Research shows those effects fade quickly.”

“Exactly—which is why SAMHSA emphasizes that interventions shouldn’t be considered in isolation. The research shows that single exposures without reinforcement don’t produce lasting change. That’s not unique to experiential tools; it’s true of virtually all educational interventions. The fade finding tells us how to design programs—build in reinforcement and follow-up. It doesn’t tell us to abandon tools that capture attention and create initial impact.”

“You should use programs like smokeSCREEN instead.”

“smokeSCREEN is excellent for what it does—curriculum-embedded learning over three hours of gameplay. But I’m running a booth at a health fair. I have ten minutes with each group. I need tools for contexts where digital curricula don’t work. The question isn’t ‘smokeSCREEN or experiential tools.’ It’s ‘Do we have the right tool for each context?’ Comprehensive prevention needs both.”

“Show me the behavior change data.”

“I can show you engagement data, attitude shift data, risk perception data—the same categories of outcomes SAMHSA cites for smokeSCREEN. Behavior change is what comprehensive programs produce over time through sustained effort. Asking a ten-minute demonstration to show long-term behavior change is like asking a spark plug to drive a car. The spark plug creates ignition; the engine produces motion. We create engagement; comprehensive programs produce behavior change.”

■ Integration, Not Competition

The goal isn’t to defend experiential tools against evidence-based programs. The goal is to build comprehensive approaches that use both effectively.

Evidence-based curricula provide structured learning, sustained content, and documented outcomes. Experiential tools provide engagement, flexibility, and observable impact in contexts where curricula don’t reach.

A school might use CATCH My Breath as its primary vaping prevention curriculum—four structured lessons with documented outcomes. But that school might also bring in experiential demonstrations for assemblies, health fairs, and parent nights. The curriculum provides depth; the demonstrations provide reach. The curriculum builds knowledge systematically; the demonstrations create memorable reference points that reinforce curriculum content.

That's integration, not competition. That's what comprehensive prevention looks like.

SAMHSA's framework supports this integration. The question for prevention professionals isn't "evidence-based or experiential?" It's "How do we build comprehensive strategies that include engagement tools, structured curricula, supportive policies, and environmental supports—all working together?"

Experiential engagement tools have a place in that comprehensive picture. Not as standalone solutions. Not as replacements for evidence-based programs. But as catalysts for emotional insight that create openings other approaches cannot create.

■ **Summary: The SAMHSA-Aligned Positioning**

When working in SAMHSA-aligned settings, position experiential tools this way:

1. We're evidence-informed, not evidence-based in the narrow sense. We're grounded in established behavioral theory (Health Belief Model, Theory of Reasoned Action), supported by peer-reviewed research on proximal outcomes, and designed to target the mediating variables that comprehensive programs depend on.
2. We target the same outcomes SAMHSA cites for evidence-based programs. smokeSCREEN's documented outcomes are improved beliefs and knowledge—mediating variables, not behavior change. We target those same variables through embodied experience rather than digital gameplay.

3. We serve contexts where curricula don't fit. Comprehensive prevention needs tools for health fairs, assemblies, community events, and brief classroom visits. That's where we belong.
4. We support SAMHSA's integration principle. "The interventions should not be considered in isolation." We're one component of comprehensive strategies—the component that creates engagement and opens conversations that sustained programming can build upon.
5. The adaptability that makes us valuable also makes standardized evaluation difficult. This is an honest acknowledgment, not a weakness. Different tools require different evaluation approaches.

That's the positioning. That's the language. And that's how to speak confidently about experiential tools in evidence-based professional settings.

For the peer-reviewed research cited in this appendix, see: Jewell, J. (2004), Journal of Alcohol & Drug Education; Jewell & Hupp (2005), The Journal of Primary Prevention; Hennessy, Lanni-Manley & Maiorana (2006), The Journal of Drug Education.

APPENDIX B

Sources and Further Reading

The arguments in this book draw on research from communication theory, behavioral science, prevention research, and my own doctoral work. This appendix organizes key sources by chapter, with brief annotations explaining their relevance.

■ Introduction and Foundational Concepts

Bandura, A. (1977). *Social Learning Theory*. Prentice Hall.

The foundational work on observational learning and modeling. Explains why parental behavior shapes children's internalized judgment long before formal prevention programs.

Kolb, D.A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Prentice Hall.

The theoretical foundation for experiential education. Explains why direct experience creates knowledge in ways that abstract instruction cannot.

■ Part One: The Prevention Ecosystem

National Highway Traffic Safety Administration. *Annual Traffic Safety Facts reports*.

Source for impaired driving fatality statistics cited in Chapter 1, including the 50% reduction from 1982 to 2019.

Fell, J.C., & Voas, R.B. (2006). "The effectiveness of reducing illegal blood alcohol concentration limits for driving." *Journal of Safety Research*, 37(3), 233-243.

Evidence for the effectiveness of policy interventions in reducing impaired driving.

■ Part Two: The Measurement Problem

Nyhan, B., & Reifler, J. (2010). "When corrections fail: The persistence of political misperceptions." *Political Behavior*, 32(2), 303-330.

Groundbreaking research showing that factual corrections don't reliably change behavior, supporting the argument that engagement matters beyond information delivery.

Nyhan, B., et al. (2014). "Effective messages in vaccine promotion." *Pediatrics*, 133(4), e835-e842.

Demonstrates that correcting vaccine misbeliefs sometimes changed beliefs without increasing vaccination intent—evidence that belief change and behavior change are different systems.

■ Part Three: How Behavior Actually Changes

McGuire, W.J. (1989). "Theoretical foundations of campaigns." In R. Rice & C. Atkin (Eds.), *Public Communication Campaigns* (2nd ed.). Sage.

The foundational work on persuasion as a sequence of steps, establishing attention as the gate through which all influence must pass.

Fishbein, M., & Ajzen, I. (2010). *Predicting and Changing Behavior: The Reasoned Action Approach*. Psychology Press.

The comprehensive statement of the Integrative Model (evolved from the Theory of Reasoned Action), explaining how attitudes, norms, and self-efficacy shape behavioral intention.

Gilbert, T.F. (1978). *Human Competence: Engineering Worthy Performance*. McGraw-Hill.

The Behavior Engineering Model, showing how environmental supports and individual repertory interact to produce performance. Applied in Project Green Yellow Red.

Becker, M.H. (1974). "The Health Belief Model and personal health behavior." *Health Education Monographs*, 2, 324-508.

The theoretical foundation explaining how perceived susceptibility, severity, benefits, and barriers influence health behaviors. Experiential tools work primarily by increasing perceived susceptibility.

■ **Part Four: Making the Invisible Visible**

Jewell, J.D. (2004). "The effectiveness of Fatal Vision goggles: Disentangling experiential versus observational learning." *Journal of Alcohol and Drug Education*, 48(3), 63-84.

Peer-reviewed research showing that experiential use of simulation goggles produces greater effects than observation alone.

Jewell, J.D., & Hupp, S.D.A. (2005). "Examining the effects of Fatal Vision goggles on changing attitudes and behaviors related to drinking and driving." *The Journal of Primary Prevention*, 26(6), 553-565.

Demonstrates measurable attitude change from goggle demonstrations in controlled research.

Hennessy, D.A., Lanni-Manley, E., & Maiorana, N. (2006). "The effects of Fatal Vision goggles on drinking and driving intentions in college students." *Journal of Drug Education*, 36(1), 59-72.

Found effects on drinking and driving intentions, with stronger effects for those who already drink more—demonstrating impact on at-risk populations.

Hardin, K., Rossi-Katz, J., & Busch, S. (2024). Improving Cognitive Empathy Through Traumatic Brain Injury Experiential Learning: A Novel Mixed Methods Approach for Speech-Language Pathology Graduate Education. *American Journal of Speech-Language Pathology*. https://doi.org/10.1044/2024_AJSLP-24-00126

Demonstrates the empathy-building function of simulation tools in healthcare provider training.

■ Part Five: Building Comprehensive Programs

SAMHSA (2020). Reducing Vaping Among Youth and Young Adults. Substance Abuse and Mental Health Services Administration.

The SAMHSA resource guide discussed extensively in Appendix A. Contains the key statement that “interventions should not be considered in isolation.”

Rogers, E.M. (2003). Diffusion of Innovations (5th ed.). Free Press.

The foundational work on how innovations spread. Explains why observability—visible engagement—matters for adoption of prevention tools.

■ Doctoral Research

Aguilar, M. (2025). Understanding Prevention Educator Adoption of Experiential Tools: The ADOPT Framework. Doctoral dissertation, University of Wisconsin-Madison.

The author’s doctoral research examining how and why prevention educators adopt certain tools over others. Introduces the Adoption Drivers of Outreach and Prevention Tools (ADOPT) Framework integrating diffusion of innovations theory, market research, and community engagement principles. Based on 176 survey respondents and 18 interviews with traffic safety educators.

■ Additional Resources

Centers for Disease Control and Prevention. The Community Guide: What Works to Promote Health.

Comprehensive reviews of evidence for various prevention interventions across health topics.

National Institute on Drug Abuse. Preventing Drug Use among Children and Adolescents: A Research-Based Guide.

Research-based principles for effective prevention programs, emphasizing comprehensive, multi-component approaches.