

VEHICLES FOR[®] *change* VR

Using Virtual Reality
to Train
auto technicians



Presented by Vehicles for Change - Visit Us Online at vfc-vr.org

our mission

- Help qualified families achieve financial stability and independence through restoring donated cars and awarding them to eligible households at a low cost
- Train underemployed and justice-involved individuals to be automotive technicians
- Industry innovators using Virtual Reality in automotive technician training

VEHICLES FOR[®]
change



Training Auto Techs Since 2016

Training Auto Technicians for 10 Years

- 10+ years of impact training and placing auto technicians
- 350+ individuals trained and placed in career-track employment
- 70% of participants have a criminal background

Proven Outcomes

- 80% completion and placement rate
- \$18–\$25/hour starting wages
- < 3% recidivism rate

Why We're Different

- Continuous feedback from employers and students drives program improvement
- Real-world experience shaped the foundation for VR training modules
- Unlike typical VR programs built by IT firms, VFC is an auto training organization building VR for auto technicians

why use virtual reality to train technicians?

- VR-based training invests in entry-level employees, creating opportunities in the workplace
- Accelerate Professional Development
- Built-in tracking and assessment tools allow managers to monitor progress and tailor support
- Saves staff time and dollars spent in training
- VR eliminates the need for equipment, tools, cars or instructor



how it all began

We built our VR training program during COVID so learners could still begin a career pathway in automotive, even as shutdowns, distancing requirements, and limited shop access disrupted hands-on instruction. VR would let participants build job-ready skills safely and flexibly, while increasing practice reps, standardizing key scenarios, providing measurable feedback, and building confidence before moving into hands-on work.

our thought process

Continuity during the pandemic would keep training moving when in-person shop access was limited

Correctional facility ready: Safer, more controlled training where tools and equipment and internet access are restricted

The program could be implemented at multiple sites and across diverse workforce development initiatives



benefits to virtual reality trainees

- **Safety:** VR provides a safe learning environment for new technicians
- **Recruitment Tool:** Allows prospects to explore the job within a platform they understand
- **Efficient:** Significantly reduced training time
- **Consistency:** Creates a uniform training tool company-wide
- **Confidence:** Skills building before working on real vehicles **
- **Retention:** Trainees actually perform repair tasks—tightening bolts, checking fluids, replacing parts—which helps with information retention**



***The United States Air Force stated using VR reduces training time by 60%**

****Students were 275% more confident to apply skills learned after training - Students were 3.75x more emotionally connected to content**

national case studies

Higher Quality Training than Traditional Methods

Multiple meta analyses of more than 60 VR training studies show that learners trained in virtual reality perform about half a standard deviation better than those in traditional training, a moderate improvement that is especially strong for complex technical and safety-critical skills

Source: <https://mattchoward.com>

Safety, Cost Effective

Because VR allows learners to safely practice high-risk, high-cost procedures as many times as needed, it is particularly effective for preparing new technicians and justice system impacted learners who have had limited prior exposure to advanced tools and equipment.

Source: <https://academia.edu>

Worth Center Reentry Training Center - OH

- 3 Individuals trained
- 5 ASE certs Passed
- 3 Fulltime Employed



our four stage training

- Learn Mode
- Practice Mode
- Perform Mode
- Test Mode

Watch the Video



+ Bonus ASE Certificate Prep



modules

MODULE 1 - Safety & Introduction

Safety Equipment Activities
Tools Identification Activity

MODULE 2 - Vehicle Inspection & Oil Change

33 Point Vehicle Inspection
Oil Change Interactive

MODULE 3 - Maintenance & Light Repair

Battery Testing & Charging Interactive
Caliper Replacement Interactive (disc brakes)
Battery Replacement Interactive

MODULE 4 - Brakes System

Caliper Replacement Interactive (disc brakes)
Disc Brakes Replacement Interactive
Rear Electronic Brakes System (EBS) Interactive
Drum Brakes Replacement Interactive

MODULE 5 - Tires, Steering & Suspension

Hunter Engineering Equipment

Tire Changing & Wheel Balancing Interactive
Wheel Alignment Interactive
Struts Replacement Interactive
Control Arm Replacement Interactive
Steering Rack and Pinion Replacement(Centre A Rack & Pinion) Interactive
Front Passenger Side CV Axle Replacement Interactive

cost structure

\$3000 per License (net cost per student \$750 to \$1000)

Includes:

Headset; Software, Employment Support

customized supported technology

- Personalized onboarding experience
- Comprehensive facilitator training
- 24/7 technical support
- Flexible program customization to fit your specific needs

Offline System Available



Employment Support

National Employment Partners

NADA, Jiffy Lube, NAPA Auto Parts, Hyundai, Bridgestone-Firestone, GM, and growing

VFC Employment Coordinator

Identifies qualified employers in the region

Connects these employers with your placement team



Currently in Use in 13 States & Canada...



Dealership Partners: Carter Myers Group, VA, and The Community Auto Group, TX

Community Colleges: VA and MD

High Schools: MD and VA

Dept of Juvenile Services: TX, WA, MI

Prison/Jail Facilities: MD, VA, IN, TX

Workforce Development: DC and PA



Ways to Use Our VR at Your Dealership...



Community Workforce Pipeline

Host VR pre-apprenticeship training to build a steady local hiring pipeline.

Workplace Readiness Training

Reinforce safety, shop protocol, and tool respect before candidates enter the service bay.

Candidate Screening Tool

Assess aptitude and attention to detail before investing in full onboarding.

Staff Upskilling

Help service advisors and sales teams better understand repair procedures and vehicle systems.

High School & CTE Engagement

Use VR demos and career events to attract the next generation of technicians.

Community Impact

Sponsor VR cohorts to create measurable workforce outcomes and community impact.

What Industry Leaders Are Saying...

NAPA is a firm believer in VFC's mission and the training they provide. Their VR program offers the technical education needed to help fill the void of tomorrow's technicians across the Automotive Aftermarket. VFC is a steward for the community and industry.



VFC is the most innovative community-based automotive training organization in America. We look forward to helping expand their programs and virtual training across the country.



innovator to watch

After a careful scan of the broad marketplace for edtech in prisons, jails, and other carceral settings, we selected 11 Innovators to Watch. These organizations are delivering leading-edge solutions that increase access to education and training for learners who are incarcerated and, in some instances, also help connect these learners to long-term employment opportunities after they're released. These organizations are at varying stages of development—one was just founded three years ago, another has 23 years of experience—but their founders and teams have all demonstrated potential for further growth.

national board members

Mark Allen

Former VP Global Compensation,
Benefits, and Mobility, TE Connectivity

Eric Andrews

Managing Director, Associate General Counsel
Goldman Sachs

Brittney Bagley

CEO, B-Luxe Events and Rentals

Geoffrey Bund

Headwall Inc. Virtual Command Centers

Elizabeth Kemp Caulder

President, Phoenix Lifestyle Marketing Group

Dana Farrakhan

Senior VP, Strategy, Community & Business Development
University of Maryland Medical Center

Dr. Valorie Sanders

Director Professional Development
American Correctional Association

Chris Hendrickson

Retired CPA

Raymone Jackson

Global Head of Diversity, Equity, and Inclusion
TRowe Price

Andy Koblenz

Former NADA Exec VP of legal,
regulatory affairs and General Counsel

Jared Krieger, CPP, PSP

Principal, KG Strategic Consultants, LLC

Michael McBride

Vice President, Non-Manufacturing
Facility Operations, General Motors

Gracelyn A. McDermott

Executive Director of Account Management,
Kaiser Permanente, Mid-Atlantic States



Greg Packer

CEO AccessPoint

Nichole Paneck

VP & Business Banking
Relationship Manager,
WesBanco Bank, Inc.

Marty Schwartz

Founder, Vehicles for Change

Stephen Taormino

President, CC&A Strategic Media

Steve Parks

Sr. VP Training
National Auto Dealers Assoc

VEHICLES FOR[®] *change* VR

Contact Information

Martin Schwartz: President, Vehicles for Change
mschwartz@vehiclesforchange.org
(443) 690-5007

Raymond Harmon: VP of VR
rharmon@vehiclesforchange.org
(443) 362-1911
vfc-vr.org

