



**WACO ISD EDUCATION FOUNDATION
COVER SHEET – PART II
Application for Grant:
2026-2027 Funding Cycle**

Assigned Grant Proposal #: _____

Project Title: _____

Grade Level(s): _____ # of Students DIRECTLY involved: _____

Subject Area(s): _____

Amount Requested: \$ _____

Grant Focus Area(s): In order to be considered, Waco Education Foundation Innovation Grant proposals must fall under one or more of the E4 focus areas: early childhood development, enhanced programming for advanced students, extended education for staff, and emphasis on student performance. NOTE: In addition to meeting one of the E4 focus areas above, grant readers are especially interested in creative and innovative grant requests that target fine arts, STEM, literacy, or enrichment.

(check all that apply)

- | | |
|--|---------------------------------|
| Early Childhood Development | Extended Education for Staff |
| Enhanced Programming for Advanced Students | Emphasis on Student Performance |
| Fine Arts | STEM |
| Literacy | Enrichment |

Assigned Proposal #: 2

Project Title: Pulse of the Future: Immersive VR Simulation in Healthcare Education

Project Description

This project integrates Virtual Reality (VR) into the healthcare curriculum to provide students with high-stakes clinical simulations and immersive anatomical explorations. By utilizing VR headsets and industry-standard software, students will practice patient care, surgical shadowing, and emergency response in a risk-free, 360-degree environment. This technology bridges the gap between textbook theory and clinical practice, offering experiences, such as "touring" the human circulatory system or practicing triage, that are otherwise impossible on a high school campus. It ensures all students, regardless of background, have access to cutting-edge medical training.

Rationale

This project aligns with the Creative Classroom Project focus area. By introducing VR, we are moving beyond traditional rote memorization into experiential learning. It directly supports the District/Campus Improvement Plan goals regarding College and Career Readiness (CCMR) by equipping students with technical literacy used in modern teaching hospitals. While our campus provides strong foundational instruction, we are constrained by limited physical space and the high cost of physical simulation manikins. VR solves this "need" by providing an infinite library of clinical scenarios at a fraction of the cost of a traditional simulation lab.

Goals

- **Enhance Clinical Competency:** 90% of participating students will demonstrate a 20% increase in "first-attempt" accuracy during physical clinical check-offs after practicing in the VR environment.
- **Expand Exposure:** Provide 100% of healthcare pathway students with at least 3 "high-acuity" experiences (e.g., OR observation or ER triage) that are typically unavailable to minors in local hospitals or nursing home settings.
- **Elevate Certification Readiness through Engagement:** Increase the pass rate for industry-recognized certifications (CNA, CMA, PCT, and Pharmacy Technician) by 12% over the previous academic year. The VR lab will serve as the primary engagement "hook," allowing students to master high-stakes clinical skills, such as sterile gloving, patient positioning, or prescription verification, in a virtual space before their official certification exams. By gamifying the "check-off" process, we ensure students remain motivated and present during the critical certification-prep months.

Plan of Operation

- **Certification "Sim-Days":** We will implement a "Mastery Monday" and "Skills Friday" schedule. Students must meet weekly attendance requirements to participate in

high-fidelity VR simulations.

- **Targeted Modules:**
 - **CNA/PCT:** Virtual patient transfer, bedside manner, and infection control (PPE) donning/doffing.
 - **CCMA:** Virtual venipuncture (blood draw) prep and ECG lead placement.
 - **Pharm Tech:** Virtual "Clean Room" simulations for sterile compounding and prescription verification.
- **Peer-to-Peer Check-offs:** Using a "Pilot/Co-Pilot" model, one student performs the virtual skill while a peer uses a physical rubric to grade them, fostering collaborative engagement.

Timeline:

- **August – September 2026:** Hardware setup and mapping VR modules to specific CNA/CCMA/PCT/Pharm Tech state standards.
- **October 2026:** Launch "Certification Quest"—a gamified attendance challenge where students unlock advanced VR surgical or pharmacy modules by maintaining 95% attendance.
- **January – March 2027:** Intensive "Clinical Boot Camp" using VR to simulate high-stress certification exam scenarios.
- **April – May 2027:** Post-certification data collection

Communication & Dissemination:

To ensure the Waco Education Foundation receives maximum visibility for its investment, we will implement the following:

- **"Certification Spotlight" Series:** We will invite the Foundation to observe a "Live Check-Off" day, where students use VR to master skills for their CNA, CMA, PCT, or Pharmacy Technician exams. This provides a high-impact photo opportunity of students performing "digital surgery" or "virtual compounding."
- **Presentations:** We are prepared to bring a mobile VR unit to a Foundation board meeting, allowing board members to step into a "Virtual Pharmacy" or "ICU" to experience the technology firsthand.
- **District-Wide Sharing:** (WISD-TV & Social Media) We will produce a short video feature titled "The Attendance Advantage," highlighting how VR has increased student presence on campus.

- **Professional Development:** Our team will present a "Best Practices" session during the district-wide Staff Development days, sharing data on how immersive tech improved our CNA/CMA pass rates. This allows other CTE programs (like Law Enforcement or Welding) to see the blueprint for similar engagement-based grants.
- **Campus Tours:** The VR lab will be a featured stop for middle school recruitment tours, using the technology to "hook" future healthcare students into the pathway.

Evaluation

The success of the "Pulse Initiative" will be measured through a three-pronged approach:

- **Certification Pass Rates:** We will compare the 2026-2027 pass rates for CNA, CMA, PCT, and Pharmacy Technician exams against a three-year campus baseline. We anticipate a 12% increase in successful certifications.
- **Attendance Correlation:** We will use district attendance software to track "Lab Day" attendance specifically. Success is defined as a 5% increase in presence on days when VR equipment is integrated into the lesson plan.
- **Skill Proficiency Timing:** We will measure the "Time to Mastery", the number of physical practice attempts required for a student to pass a clinical check-off. We expect students using VR "pre-training" to reach proficiency 30% faster than those using traditional methods alone.
- **Engagement Qualitative Data:** Pre- and post-program surveys will assess student confidence in their ability to perform clinical tasks in a real-world healthcare setting.

Key Personnel

- **Healthcare Instructor:** Responsible for curriculum integration and student assessment. 10+ years of clinical experience.
- **Campus Instructional Aide:** Responsible for hardware maintenance, software updates, and troubleshooting.
- **Campus Dean:** Oversees budget compliance and alignment with state standards.

Budget and Budget Narrative/Justification

The requested funds will be used to purchase enterprise-grade VR headsets and multi-user software licenses tailored for CNA, CMA, PCT, and Pharm Tech standards.

- **Technology**
 - The requested \$8,500.00 covers the comprehensive SimX Virtual Reality

software suite, which serves as the "brain" of our healthcare simulation project.

- **2 SimX Software Licenses:** These licenses allow two concurrent users (or groups) to enter the virtual clinical environment. SimX is a leader in medical VR, providing a high-fidelity, immersive experience that replicates real-world hospital settings without the risks associated with live patients.
 - **12 Marketplace Scenarios:** This selection of pre-built scenarios allows us to tailor the curriculum to specific healthcare certifications (such as CNA, CCMA, or Phlebotomy). These modules provide standardized training in high-stakes clinical situations that students might not otherwise encounter during their limited clinical rotations.
 - **1 Virtual Manikin (Build Your Own):** This tool provides the flexibility to create custom patient encounters tailored to our specific district curriculum. It allows instructors to adjust patient vitals and responses in real-time, challenging students' critical thinking and diagnostic skills.
 - **Education and Support Services (Essential Plan) & AI Assistant:** To ensure the sustainability of this technology, these services provide the necessary technical support and training for staff. The AI Assistant enhances the student experience by enabling more natural, voice-activated interactions with virtual patients, thereby increasing the realism of the simulation.
- **Long-Term Supplies / Equipment**
 - **Oculus Headsets:** While not requested from the Foundation, these are essential for the project's execution. These units are being funded through the Campus Budget (\$600.00). They provide the hardware interface necessary for students to access the SimX software environment.

