



Joliet Township High School - District 204

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To: Dr. Karla Guseman

From: Mr. Chris McGuffey

Date: May 2, 2025

Subject: Board Recognition: Electronics & Robotics students restore Joliet Fire Department Robots

I'd like to recognize several students and instructors from the Joliet West and Joliet Central Electronics & Robotics programs for innovative partnership to restore two of Joliet Fire Department's robot ambassadors.

Through a service-based enrichment learning project, Career and Technical Education (CTE) students at both campuses applied advanced technical skills to restore two robotic community education tools "Freddie the Fire Truck" and "Andy the Ambulance" that had been out of commission since the early 2000s.

Under the guidance of instructors John Barber and Nicole Gubbins, students were tasked with diagnosing and repairing complex mechanical and electronic issues in these vintage robots. The restoration required critical thinking, teamwork, and real-world troubleshooting.

- **Joliet West:** Students in the Electronics and Robotics 1 & 2 classes brought "Freddie the Fire Truck" back to life. The project not only restored the robot's interactive capabilities (movement, lights, and voice) but also generated significant student engagement, with students creating a social media following to track the restoration progress.
- **Joliet Central:** Electronics students undertook the restoration of "Andy the Ambulance." Students engaged in deep problem-solving to repair the robot's voice box, eye mechanisms, and water-squirting system, identifying "sneaky" electrical faults and replacing microscopic fuses to return the unit to full functionality.

These restoration projects have provided the Joliet Fire Department with approximately \$20,000 worth of revitalized equipment. Both Freddie and Andy will now return to active duty, serving as interactive ambassadors for fire safety and emergency education at community parades, school visits, and public events. This collaboration exemplifies the value of authentic learning, where classroom skills are directly applied to benefit the community.

We would like to recognize the following students for their exceptional application of electronics skills and dedication to community service:



Joliet Township High School - District 204

| Student | Campus | Project |
|-----------------------|----------------------------|------------------------|
| Nicholas Hicks | Joliet West High School | Freddie the Fire Truck |
| Jose Zamudio | Joliet West High School | Freddie the Fire Truck |
| Christian Torres | Joliet Central High School | Andy the Ambulance |
| Jeremy Martinez Zapot | Joliet Central High School | Andy the Ambulance |
| Javier Barrios | Joliet Central High School | Andy the Ambulance |
| Greg Rozman | Joliet Central High School | Andy the Ambulance |

A big thank you to several adults who worked together to bring this authentic opportunity to our students.

| | |
|----------------|---|
| John Barber | Joliet West Electronics & Robotics teacher |
| Nicole Gubbins | Joliet Central Electronics & Robotics teacher |
| Tim Chaplin | Joliet Fire Department Battalion Chief |
| Eric Clem | Joliet Community Paramedic |

[Joliet West News Article](#)
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[Joliet Central News Article](#)
[Joliet Central Photo Album](#)



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The mission of Joliet Township High School, a historically rich, unified and innovative learning community, is to empower every student to compete and contribute positively to our community and global society by providing a rigorous and personalized education through an academy environment.

Joliet Township High School ensures equal educational opportunities are offered to students, regardless of race, color, national origin, age, gender, religion, disability, veteran's status, or marital status